To Doctor Treviranus,
Professor of Botany,

respectfully from
The Author.

Dr Engelm,
bought at Treviranus' sale

SYNOPSIS

PLANTARUM SUCCULENTARUM,

CUM

DESCRIPTIONIBUS,

SYNONYMIS, LOCIS;

OBSERVATIONIBUS ANGLICANIS,

CULTURAQUE.

AUTORE

A. H. HAWORTH, F.L.S. &c.

LONDINI:

TYPIS RICHARDI TAYLOR ET SOCH,

SHOE-LANE.

M.DCCCXII.

PRINTED FOR THE AUTHOR; AND TO BE HAD OF HIM ONLY, AT LITTLE CHELSEA.

Price 10*s.* 6*d.*

PREFACE.

THE following concise Catalogue is offered as a more complete enumeration of Succulent Plants, as far as cultivated in the neighbourhood of London, than has hitherto been given to the Public.

The plants themselves are nearly all alive in my own collection, at this present time. Those which I have never seen in a living state, are marked †;—and such as are presumed not to have been first *specifically* named by other authors, thus *. Many are rejected which have been given as *Succulent*, in other lists of *Succulent Plants*,—as the Orders SAXIFRAGÆ, and COMMELINEÆ; the genus *Veltheimia*, &c. And even *Yucca* (notwithstanding its resemblance to the succulent genus *Agave* has thus far secured it a place) is considered objectionable; and perhaps prevents us from consistently refusing *Dracæna Draco*, and the order BROMELIÆ.

For the sake as well of keeping genera as entire as may be, and of avoiding the difficulty of discriminating between species which are succulent, and others which are very slightly so, in

the difficult tribes of *Piperes* and *Euphorbiæ*; the whole of both will be enumerated. The remaining Succulents (not yet in the gardens) would have been added from authors; but from a fear of extending this little work too far;—the trouble would have been small, as they have been long studied by me. They are at present in considerable confusion, even in authors of the first repute; and some of them are described more than once, in the same work. In England, the botanists of late years have paid no attention to them.

With respect to culture, Succulent Plants prefer a sandy unmanured soil, and comparatively small pots. The coarse red sand of gravel-pits, (the freer from loam the better,) they are extremely partial to, (disliking not its lesser stones) mixed with about an equal quantity, or even less, of common earth for the more succulent species; and with proportionably more earth for those which are less so.

They must be watered very sparingly, and not often in winter, but in the dry weather of summer require water plentifully, and almost daily, if shrubby; and of course less when more succulent—the Cacti and Euphorbiæ the least of

all; and very rarely even in summer over their heads—in winter, all the more succulent kinds in their pans only.

Those marked F. should be placed in garden-frames facing the south, from about Michaelmas to Lady-day, defended from frosts and rains; but in all fair, and not frosty weather, should be exposed entirely to the air.

The G. H. kinds may be housed and unhoused at the same time—admitting air freely when Fahrenheit's thermometer is above 40, but not at all when under 35, or foggy. At 32 or 33 in the open air, delay not the least to light the fires,—but make no more than are necessary to expel frost; for fire at best is insalubrious to plants.

Those marked S. are best in the Dry-stove or on the shelves of a Bark-stove all the year, with plenty of air in summer at the temperature of about 70, and a little occasionally even in winter when the sun shines warm, and the thermometer is not lower than 60. If the heat of the house descends to temperate, the plants will not suffer, and it is not necessary to urge it higher than 60 by fire, except perhaps at the eve of an

intense frost. When the external air declines to 50, it is time to light the fires.

As to shifting these plants, the larger ones require it not oftener than once in two or three years; but once or twice annually clear away the upper surface of their pots, and replenish it with fresh compost. The lesser plants must be moved about the end of August, or as often as their lesser fibres form dense mats at the bottoms and sides of their pots, paring off with a good knife the matted part, without breaking their balls of earth. They may be replanted either in the same, or larger pots, as discretion dictates; but never cut away any fleshy roots, though matted, but give them more pot room. After shifting, water the new earth with a rose-pan to settle it.

All the G. H. and F. species in summer should be placed on a south sheltered border, and in winter give the more delicate ones situations as near the glass as possible. Keep the whole from slugs and worms.

The Abbreviations and Classes are the same as in Hortus Kewensis, and similar works: but the genera and distribution of their species often new.

LITTLE CHELSEA,
Nov. 1811.

LIST OF SUBSCRIBERS.

ALDERSON John, M. D. Hull
Anderson William, F. H. S. gardener to J. Vere, esq. Kensington Gore.—10 copies
Atkinson John, surgeon, Park-square, Leeds, F. E. S.—2 copies
Banks, the right hon. sir Joseph, bart. K. B. P. R. S. &c.
Bayfield Mr. Norwich
Brames Mr. Peter, nurseryman, Fulham
Broadley John, esq. Hull
Brown Mr. John, gardener to William Jones, esq. Putney Heath
Brown Mr. Thomas, gardener to Lord Cawdor
Burrell rev. John, M. A. rector of Letheringsett, F. L. S. & F. E. S.
Carpue J. C. surgeon, Dean-street, Soho, London
Caulier William, esq. New Grove, Mile End
Caulier Mr. Henry, Ditto
College, Harvard, Massachusetts state, America
Colvill Mr. jun. nurseryman, King's Road
Cooper Mr. nurseryman, Norwich
Cooper Mr. gardener to Lord Middleton, Yorkshire
Creswell Thomas, esq. Battersea Cottage
Crosse John, esq. Hull
Cuff Mr. F. H. S. Teddington, Middlesex
Dalton rev. James, A. M. F. L. S. Copgrove, Yorkshire
De Vans count, Brook-street, Grosvenor-square
De Vans countess, Ditto
Dickson Mr. James, F. L. S. V. P. H. S. Covent Garden
Donn Mr. James, F. L. S. curator of the botan. garden, Cambridge.—2 copies
Duff Mr. Christie, Brompton.—2 copies
Dundas, right hon. Lord, F. R. S. &c. Arlington-street
Elliot, John, esq. F. R. S. &c. Pimlico
Evans Thomas, esq. Commercial Road
Faulder Mr. bookseller, Bond-street.—4 copies
Ferrier L. H. esq. commiss. of customs, Belleside, Edinburgh
Forster rev. William, A. B. Leeds, Yorkshire
Forster Edward, esq. F. L. S.
Francis rev. Robert Bransby, Edgefield, Norfolk
Frost Charles, esq. Hull
Gibbs Mr. George, Hackney
Goodge Alexander, esq. Spital-square, London
Hatchard Mr. bookseller, Piccadilly.—10 copies
Hatchett Mr. John, F. L. S. & F. E. S. Kingsland.—2 copies
Harding Mr. bookseller, St. James's-street.—4 copies
Hawkins sir Christopher, bart. F. H. S. M. P.
Hibbert George, esq. M. P. F. R. S. &c. Mincing-lane, London
Hill Mr. nurseryman, Laytonstone
Hitchins Mr. Norwich
Howard Mr. John, F. E. S. Elstead, Surry
Irwin Mr. John G. Fulham
Institution, London
Kerr John Bellenden, esq.
Knowlton Thomas, esq. F. L. S. Chatsworth

Lambert A. B. esq. F. R. S. V. P. L. S. &c. Grosvenor-street, London
Law Mr. Charles, Stoke Newington.—6 copies
Lloyd John, esq. F. R. S. &c. Wiggtar, near St. Asaph
M'Kay Mr. J. T. A. L. S, curator of the botanical garden, Dublin.—6 copies
Malcolm Mr. jun. nurseryman, Kensington
Milne Mr. Thomas, A. L. S. nurseryman, Fulham.—3 copies
Osborn Alexander, esq. commiss. of customs, Edinburgh
Parker J. C. esq. Hull
Philips Richard Elliston, esq. commiss. of customs, Edinburgh
Rudge Edward, esq. F. R. S. & F. L. S. London
Sabine Joseph, esq. F. R. S. &c. Duke-street, Portland-place, London
Salisbury R. A. esq. F. R. S. &c. Queen-street, Edgeware Road.—2 copies
Salisbury Mr. William, botanic garden, Sloane-street
Salt Mr. Jonathan, F. L. S. Sheffield
Scales Mr. Robert, F. E. S. Halvergate, Norfolk
Setchell Mr. Henry and Son, booksellers, King-str., Covent-garden.—2 copies
Shepperd Mr. curator of the botanic garden, Liverpool
Simpson J. esq. Hull
Sims John, M. D. F. L. S. Upper Guildford-street, London
Society Horticultural, London
Society Philosophical, Philadelphia
Solly Samuel, esq. Walthamstow, Essex
Spence William, esq. F. L. S. Drypool, Yorkshire
Saunders James Ebenezer, 19 Lawrence Pountney-lane
Saunders Mr. Thomas, 112 Upper-Thames-street
Steinhauer rev. H. Fulneck, near Leeds
Swainson John Timothy, esq. F. L. S. collector of customs, Liverpool.—2 copies
Taylor Mr. Richard, F. L. S. Shoe-lane, London
Turner Dawson, esq. M. A. F. R. S. &c. Yarmouth
Tyton Arthur, esq. F. L. S. Wimbledon Common, Surry
Vaughan William, esq. Dunster-court, Mincing-lane.—2 copies
Veitch Henry, esq. commiss. of customs, Elliock, Edinburgh
Vere James, esq. F. L. S. Kensington Gore
Waddell Alex. esq. St. James's-place, Leith Links, Edinburgh
Waddell Andrew, esq. Ditto
Walker J. esq. F. R. S. &c. Bedford-square
Watson P. W. esq. Hull
Welch Mr. Thomas, East Fulham
West Morris, esq. secretary of customs, Edinburgh
Whitley Mr. Reginald, nurseryman, Fulham.—2 copies
Wigg Mr. Lilly, A. L. S. Yarmouth
Willbraham R. esq. F. H. S.
Wilkin Simon, esq. F. L. S. Costesy, Norfolk
Woods Mr. Samuel, secretary to the London Institution.

Classis I.

MONANDRIA

MONOGYNIA.

SALICORNIA. (Salt Wort.) *Gen. pl.* 14.
Calyx ventricosus, integer. *Pet.* 0. Sem. 1.

S. (Arabian) foliis alternis vaginantibus obtusis dehiscentibus. *Persoon syn.* 5. 7. *arabica.* 1.
HABITAT in Arabia. S. ♄.
FLORET . . . .
CULT. 1758.

S. (Shrubby) geniculis teretibus integris, internodiis æqualibus, spicis subsessilibus cylindraceis obtusis. *Sm. fl. br.* 3. 2. *fruticosa.* 2.
HABITAT Angliæ maritimis. F. ♄.
FLORET Aug. Sept.

S. (Rooting) caule lignoso, basi procumbente radicante, articulis compressis emarginatis; interstitiis fere cylindricis; spicis oblongis; stylis profundè divisis; staminibus duobus. *Eng. bot.* 1691. *radicans.* 3.
HABITAT Angliæ maritimis. F. ♃.
FLORET Aug. Sept.

S. (Herbaceous) geniculis compressis emarginatis, internodiis obconicis, spicis pedunculatis apicem versus attenuatis. *Sm. fl. br.* 2. 1.—*Eng. bot.* *herbacea.* 4.
HABITAT Angliæ maritimis. F. ⊙.
FLORET Aug. Sept.

annua. 5. S. (Annual) ramosior procumbens, foliis brevibus purpurascentibus. *Dillen. in Raii syn.* 137.

HABITAT Angliæ maritimis. F. ☉.

FLORET Aug. Sept.

Classis II.

DIANDRIA

MONOGYNIA.

GRATIOLA. *Gen. pl.* 37.

Cor. irregularis resupinata. *Stam.* 2 sterilia. *Caps.* 2-locularis. *Cal.* 7-phyllus: 2 exterioribus patulis.

Monnieria. 1. G. (Monnier's) foliis subrotundo-oblongis carnosis, caulibus reptantibus.—*Gratiola Monnieria. Willd. sp. pl.* 1. 102?—*Roxb. corom.* 2. 178.

HABITAT in Indiis. S. ♃.

FLORET Aug. Sept.

INTROD. 1772.

OBS. Contrary to the generality of succulent plants, this species requires a great deal of moisture, and will grow even in mud and water. It goes by the above name in Gardens at present, but a very different plant was so called at Kew a few years since.

TRIGYNIA.

PIPER. (Pepper.) *Gen. pl.* 59.

Cal. 0. *Cor.* 0. Bacca monosperma.

* *Foliis minus succulentis, petiolatis.*

P. (Blunt-leav'd) foliis peltatis orbiculato-cordatis obtusis repandis, spicis umbellatis. *Willd. sp. pl.* 1. *p.* 166.—*Saururus arborescens, foliis amplis rotundis et umbilicatis. Plum. americ.* 56. *t.* 74. *peltatum.* 1.
HABITAT in Ind. Occ. S. ♃.
FLORET ....
INTROD. 1748.

P. (Umbell'd) foliis orbiculato-cordatis acuminatis venosis, spicis umbellatis, caule erecto sulcato pubescente. *Willd. sp. pl.* 1. 167. —*Piper latifolium. Jacq. hort. vindob. v.* 2. *t.* 216. *umbellatum.* 2.
HABITAT in Ind. Occ. S. ♄.
FLORET Mai.—Jul.
INTROD. 1748.

P. (Broad-leav'd) foliis elliptico-ovatis acuminatis glabris basi inæqualibus venosis, petiolis appendiculatis, spicis axillaribus solitariis. *Willd. sp. pl.* 1. 163. *macrophyllum.* 3.
HABITAT in Ind. Occ. S. ♄.
FLORET ....
INTROD. 1800.

P. (Hook'd) foliis oblongo-ovatis acuminatis basi inæqualibus venosis, spicis solitariis axillaribus uncinatis. *Willd. sp. pl.* 1. 162. *aduncum.* 4.
HABITAT in Jamaica. S. ♄.
FLORET Mai.
CULT. 1748.

reticulatum. 5. P. (Netted) foliis cordatis septemnerviis reticulatis. *Willd. sp. pl.* 1. 162.
HABITAT in Ind. Occ. S. ♃.
FLORET Aug.
INTROD. 1748.

Amalago. 6. P. (Rough-leav'd) foliis lanceolato-ovatis 5-nerviis rugosis. *Willden. sp. pl.* 1. 160.
HABITAT in Jamaica. S. ♃.
FLORET ....
CULT. 1759.

nigrum. 7. P. (Black) foliis ovatis subseptemnerviis glabris, petiolis simplicissimis. *Willd. sp. pl.* 1. 159.
HABITAT in Ind. Or. S. ♄.
FLORET ....
INTROD. 1790.

Betle. 8. P. (Betle) foliis ovatis oblongiusculis acuminatis 7-nerviis, petiolis 2-dentatis. *Willd. sp. pl.* 1. 159.
HABITAT in Ind. Or. S. ♄.
FLORET ....
INTROD. 1804.

longum. 9. P. (Long) foliis cordatis petiolatis sessilibusque. *Pers. syn.* 31. 12.—*Rumph. amboyn.* 5. *t.* 116. *f.* 2.
HABITAT in India. S. ♄.
FLORET ....
CULT. 1788.

** *Foliis magis succulentis, petiolatis.*

maculosum. 10. P. (Spot-stalk'd) foliis peltatis ovatis. *Linn. sp. pl.* 42. 15.—*Piper (variegatum), foliis cordato-ovatis peltatis, spicis geminatis. Pers. syn.* 35. *no.* 104.—*Peperomia (variegata), foliis cordato-ovatis peltatis, spicis geminatis.*

Fl. peruv. t. 52. *f.* a.—*Plum. americ.* 60. *t.* 66.
HABITAT in montibus Pillao. S. ♃.
FLORET Sept.
INTROD. 1790.
Folia subtus albida, Petioli maculis purpureis variegati. Pers. syn. 35. 104.
OBS. Folia subtus, caules maculati, petiolique dense pubescentia.

P. (Clusia-leav'd) foliis obovatis obtusis venosis, spica solitaria terminali. *Willd. sp. pl.* 1. 159. *Clusiæfolium.* 11.
HABITAT in Ind. Occ. S. ♄.
FLORET Mai.
INTROD. 1793.

P. (Shining-leav'd) foliis lanceolato-ovatis basi obliquis glabris nitidis. *Willd. sp. pl.* 1. 163. *nitidum.* 12.
HABITAT in Jamaica. S. ♄.
FLORET Mai. Jun.
INTROD. 1793.

P. (Two-row'd) foliis ovatis acuminatis, spicis conjugatis, caule radicante. *Pers. syn.* 34. 71.—*Plum. amer.* 51. *t.* 67. *distachyon.* 13.
HABITAT in Americæ calidioris montibus. S. ♃.
FLORET Jun. Jul.
INTROD. 1793.

P. (Hairy-leav'd) foliis ovatis acuminatis obliquis hirsutis rugosis: nervis alternis venosis, spicis erectis. *Willd. sp. pl.* 1. 163. *hispidum.* 14.
HABITAT in Jamaica. S. ♄.
FLORET Jul.
INTROD. 1793.

pelluci-dum. 15. P. (Pellucid) foliis parvulis cordatis cauleque erecto annuo subpellucidis.—*Piper foliis cordatis petiolatis, caule herbaceo. Willd. sp. pl.* 1. 163.—*Plum. americ.* 54. *t.* 72.
HABITAT in America calidiore. S. ⊙.
FLORET Apr.—Nov.
INTROD. 1748.

*** *Foliis magis succulentis, absque petiolo.*

cuneifo-lium. 16. P. (Laurel-leav'd) subherbaceum, foliis cuneato lanceolatis amplexicaulibus coriaceo-carnosis nervosis, lateribus inclinatis, caule suberecto ramoso subnodoso.—*Piper cuneifolium. Jacq. hort. vind. v.* 2. *t.* 214.
HABITAT in India? S. ♃.
FLORET ....
INTROD. circa 1809.
OBS. Sequenti forte nimis affinis.

amplexi-caule. 17. P. (Stem-clasping) subherbaceum, foliis lanceolato-ovatis amplexicaulibus nervosis carnosis, caule erecto simplici. *Willd. sp. pl.* 1. 165.
HABITAT in Ind. Occ. S. ♃.
FLORET Jun.—Sept.
INTROD. 1793.

Magno-liæfoli-um. 18. P. (Magnolia leav'd) foliis obovatis obtusissimis, pedunculis terminalibus ramosis, caule ramisque radicantibus. *Ait. hort. kew. ed.* 2. 71.
HABITAT in Ind. Occ. S. ♃.
FLORET Jan.—Mar.
INTROD. 1793.
OBS. Folia rubro marginata, crassa.

P. (Blunt-leav'd) foliis obovatis carnosis lævibus enerviis.—*Piper obtusifolium. Willd. sp. pl.* 1. 165. *obtusifolium.* 19.

HABITAT in India Occ. S. ♃.

FLORET Ap.—Sept.

CULT. 1739.

**** *Foliis magis succulentis, sæpius 3—6-nis, at indies oppositis in eodem radice, vel caule: caulibus plus minus rubris, et fere geniculatis.*

P. (Villous) foliis ternis oppositisque rhombeo-lanceolatis trinerviis ciliatis villosis, subtus punctatis.—*Piper (blandum), foliis ternis lanceolatis acuminatis trinerviis ciliatis subtus punctatis. Willd. sp. pl.* 1. 164. *blandum.* 20.

HABITAT in Carraccis. S. ♃.

FLORET Mai.—Nov.

INTROD. 1802.

P. (Pubescent) foliis oppositis, (rarissime ternis) rhombeis coriaceo-carnosis, trinerviis, (nervo principe ramoso) minutissime pubescentibus ciliatisque; caulibus erectis. *pubescens.* 21. *

HABITAT in India? S. ♃.

FLORET Sept. Oct.

INTROD. circa 1809.

OBS. Sequenti forte nimis affinis.

P. (Many-spik'd) foliis verticillatis rhombeo-ovatis integerrimis petiolatis trinerviis pubescentibus. *Willd. sp. pl.* 1. 167.—*Piper obtusifolium. Jacq. ic. v.* 1. *t.* 9. *polystachion.* 22.

HABITAT in Jamaica. S. ♃.

FLORET Jun. Jul.

INTROD. 1775.

trifolium. 23. P. (Three-leav'd) foliis ternis subrotundis. *Pers. syn.* 34. 73.
HABITAT in America calidiore. S. ♃.
FLORET Jun. Jul.
INTROD. 1802.

pulchellum. 24. P. (Small-leav'd) foliis quaternis subsessilibus oblongis enerviis integerrimis, spicis terminalibus. *Willd. sp. pl.* 1. 169.
HABITAT in Jamaica. S. ♃.
FLORET Jul.—Sept.
INTROD. 1778.

stellatum. 25. P. (Starry) herbaceum, foliis verticillatis oblongis acuminatis trinerviis glabris, caule erecto. *Pers. syn.* 34. 78.—*Jacq. hort. vind. v.* 2. *t.* 217.
HABITAT in Jamaica. S. ♃.
FLORET Mai.—Jul.
INTROD. 1802. (Hort. Cantab. ed. 6.)

inæqualifolium. 26. P. (Unequal-leav'd) foliis verticillatis obovatis: floralibus majoribus, spicis terminalibus inæqualibus subquaternis.—*Peperomia inæqualifolia. Fl peruv.* 1. *p.* 30. *t.* 36. a.
HABITAT in Peruviæ locis saxosis et supra arbores, frequens. l. c.
FLORET Jul. Aug. S. ♃.
CULT. in Hort. nost. circa 1800.
OBS. The genus Peperomia is not at present here adopted, on account of my not exactly knowing how many species to refer to it, for want of opportunities to examine their fructifications: but it will probably embrace all the more herbaceous and succulent species.

Classis IV.

TETRANDRIA

MONOGYNIA.

PLANTAGO. (Plantain.) *Gen. pl.* 186.

Cal. 4-fidus. *Cor.* 4-fida, limbo reflexo. *Stamina* longissima. *Caps.* 2-locularis, circumscissa.

P. (Cape) foliis lanceolatis carnosis ciliatis, rarius inferne villosis.—*Plantago (capensis), foliis ellipticis, spicæ floribus distinctis. Willd. sp. pl.* 1. 614. *capensis.* 1.
HABITAT C. B. S. G. H. ♄.
FLORET Aug.—Nov.
INTROD. 1788.

P. (Hairy) foliis linearibus carnosis, scapoque hirtis; radice bienni.—*Plantago (hirsuta), foliis linearibus ciliatis, spica cylindrica, scapo hirsuto. Willd. sp. pl.* 1. 645. *hirsuta.* 2.
HABITAT C. B. S. G. H. ♂.
FLORET Jun. Jul.
INTROD. 1801.

CISSUS. *Gen. pl.* 192.

Bacca 1 sperma, cincta calyce *Corolla*que 4-partita.

C. (Square-stalk'd) foliis dentatis carnosis serrato-dentatis, caule 4-gono tumidiusculo. *Willd. sp. pl.* 1. 657. *quadrangularis.* 1.
HABITAT in Arabia, atque Ind. Or. S. ♄.

FLORET ....
INTROD. 1790.

acida. 2. C. (Acid) foliis ternatis obovatis glabris carnosis incisis. *Willd. sp. pl.* 1. 657.
HABITAT in Jamaica. S. ♄.
FLORET ....
INTROD. 1692.

TILLÆA. *Gen. pl.* 237.

Cal. 3—4-partitus. *Petala* 3—4, æqualia. *Caps.* 3—4 polyspermæ.

muscosa. 1. T. (Mossy) procumbens, floribus trifidis.—*Willd. sp. pl.* 1. 721.—*Eng. bot.* 116.
HABITAT in Angliæ ericetis. H. ⊙.
FLORET Mai. Jun.

Classis V.

PENTANDRIA

MONOGYNIA.

NOLANA. *Gen. pl.* 254.

Cor. campanulata. *Stylus* inter germina. *Nuces* 5, 2—4-loculares.

prostrata. 1. N. (Trailing) caulibus prostratis, foliis ovatis carnosis.—*Nolana prostrata. Willd. sp. pl.* 1. 794—*Bot. mag.* 731.
HABITAT in Peru. G. H. ♄. vel H. ⊙.
FLORET Jul.—Sept.
INTROD. 1761.

CLAYTONIA. *Gen. pl.* 402.

C. (Virginian) foliis linearibus, petalis integris. *virginica.*
Willd. sp. pl. 1. 1185.—*Bot. mag.* 941.
HABITAT in Virginia. F. ♃. 1.
FLORET Mar.—Mai.
INTROD. 1748.

C. (Carolina) foliis spatulatis, petalis integris. *caroliniana.*
Michaux amer. 1. 160.—*Claytonia spatulæfolia. Salisb. par. lond.* 71. 2.

OBS. This and the following are distinct genera, as well in *habit* as in *characters.* But I postpone giving their distinctions till I have again examined their living flowers. An eminent Botanist has said that in constructing genera, *we should have an eye to, and as it were privately consult their natural habits; as a secondary help.* In this however he was mistaken; for long experience proclaims, that steps *directly the reverse* conduct us *nearer* to the *truth.* The natural habits lead to every thing.—Nov. 1811.

LIMNIA.

Linn. in act. stockh. 1746. *p.* 130. *t.* 5. *(monente Hort. k. ed.* 2. *v.* 2. 53.*)*

L. (Siberian) foliis nervosis: radicalibus caulinisque ovatis, racemo secundo, petalis bifidis.—*Claytonia sibirica. Willd. sp. pl.* 1. 1186. *sibirica.* 1. †
HABITAT in Siberia. H. ⊙.
FLORET Aug.—Oct.
CULT. 1768.

L. (Chickweed-like) foliis radicalibus spatulato-ovatis, caulinis ovatis distinctis, racemis *Alsinoides.* 2.

subgeminatis, floribus secundis, bracteis ovatis linearibusque. *Bot. mag.* 1309.
HABITAT prope Nootka Sound. H. ☉.
FLORET Jun.—Oct.
INTROD. 1794.

perfoliata. 3. L. (Perfoliate) foliis superioribus perfoliatis.—*Claytonia, foliis enerviis: radicalibus rhombeo-ovatis; caulinis subconnatis, floribus umbellato-verticillatis, petalis integris. Willd. sp. pl.* 1. 1186.
HABITAT in Americæ septentrionali-occident. maritimis. H. ☉.
FLORET Jul.—Sept.
INTROD. 1794.

POLYCARPEA.

Lam. in journ. d'hist. nat. 2. *p.* 3. *t.* 25. (monente Pers. syn. 1. 262.) *Cal.* 5-phyllus. *Petala* 5, emarginata. *Stylus* simplex. *Caps.* 3-gona, 1-locularis, 3-valvis, polysperma. *Pers.* l. c. sub HAGEA.

Teneriffæ. 1. P. (Teneriffe) caule herbaceo prostrato, foliis spathulatis subacuminatis. *Pers. l. c. sub* HAGEA.
HABITAT in monte famoso Teneriffæ. S. ♃.
FLORET Jun.—Sept.
INTROD. circa 1807.

ECHITES.

Contorta. *Folliculi* 2, longi, recti. *Sem.* extremitate superiori comosa. *Cor.* hypocraterif. faux nuda. *Antheræ* medio cum stigmate cohærentes. *Hort. kew. ed.* 2. 68.

bispinosa. 1. E. (Two-spin'd) aculeis binis extrafoliaceis, foliis lanceolatis glabris, corollis hypocrateriformibus.

HABITAT C. B. S. S. ♄.
FLORET Jul.—Nov.
INTROD. 1795. *Hort. kew. l. c.*

DIGYNIA.

SARCOSTEMMA.

Asclepiadea. *Massæ Pollinis* læves, 10, pendulæ. *Corona staminea* duplex: exterior cyathiformis vel annularis, crenata. *Cor.* rotata. *Hort. kew. ed. 2. v. 3. p. 76.*

S. (Twisting) H. Kew. l. c.—*Cynanchum viminale, caule volubili perenni aphyllo. Pers. syn.* 272.—*Euphorbia viminalis. Linn. sp. pl.* 2. 649.—*Tithymalus* 9. *Mill. dic. ed.* 1. *viminale.* 1. †
HABITAT in Africæ maritimis et Indiæ nemorosis. Caulis nudus, crassitudine calami. *Pers. l. c.* S. ♄.
FLORET ....
CULT. 1731.

CEROPEGIA.

Contorta. *Folliculi* 2, erecti. *Sem.* plumosa. *Cor.* urceolatæ limbus connivens. *Pers. syn.* 277.

C. (Forked) tota carnosa; caulibus strictis dichotomis articulatis teretibus, foliis linearibus acutis horizontalibus sesquiuncialibus; supra costa venisque simplicibus albis. *dichotoma.* 1. *
HABITAT .... S. ♄.
FLORET Aug.
INTROD. ante 1806.

C.? (Leafless) carnosa, ramis dichotomis multiarticulatis debilibus teretibus; foliolis stipulæformibus adpressis, mox emarcidis. *aphylla.* 2. *

Habitat C. B. S.? S. ♄.
Floret ....
Cult. circa 1808.
Obs. *Foliola* circa lineam longa, et demum fere deltoidea, et nisi lente fere inconspicua. —Parum lactescit, habitu omnino Tithymali denudati, vel potius Cacti penduli *Linn.*

HOYA.

Asclepiadea. *Massæ Pollinis* læves, 10, erecto-conniventes. *Antheræ* membrana terminatæ. *Corona staminea* 5-phylla: foliolis depressis, angulo interiore producto in dentem antheræ incumbentem. *Cor.* rotata. *Hort. kew. ed.* 2. 84.

carnosa. 1. H. (Fleshy) foliis ovali-oblongis carnosis, corollis barbatis, coronæ foliolis subtus sulcatis. *Hort. kew. l. c.—Asclepias carnosa. Bot. mag.* 788.—*Smith's exot. bot. t.* 70.
Habitat in Asia. S. ♄.
Floret Jul. Aug.
Introd. 1802.
Obs. It will survive, but not flower in the Greenhouse: and in a strong heat, and poor dry soil flowers best.

STAPELIA. *Gen. pl.* 432.

Ligulæ (s. Nectarii stella exterior) 5, basi connatæ, imo corollæ insertæ, genitalia ambientes. *Stamina* 5, corniculiformia sæpissime bipartita (exteriore ramo incurvo-cultriforme, interiore recurvo-calcariforme) intra *ligulas*, et eas basi connata, interne ipsa cava basi, antheras duas distinctas sessiles cerinas (recon-

ditas carneo albo processu) gerentia; inde genus pentandrum; nec gynandrum!

Obs. 1. Post fœcundationem (vel potius in ipso coitu) antheræ cum stigmatibus cohærent! atque confluunt!

Obs. 2. Herbæ perennes præsucculentæ (si vulneratæ) copiose aqueo-lactescentes, radicibus, fibris simplicibus longis crassis. *Rami* crassi tetraquetri erecti s. adscendentes, cereiformes, inferne parum ramosi, pube brevissimo tecti, angulis crebre dentati, dentibus tumidulis foliolo erecto lineari carnoso vix conspicuo mox marcescenti finientibus. *Pedunculi* inæquales subflexi teretes villosuli, prope dentes inferiores erumpentes in fasciculum. *Calyx* 5-phyllus stellaris, foliolis lineari-attenuatis loreo-carnosis, uti tota inflorescentia. *Corolla* 5-partita stellaris lævis nitens, basi turgida, plus minus hirta præcipue basin versus, et præciliata; fere semper absque maculis, at notata striolis transversis interruptis concentricis; semper fœtida. *Stylus* (Nectarii centrum) tabulæformis! 5-angularis, supra planus niveus, lateribus sæpe 5-angulatim declivis, angulis ipsis stigmatiferis, ad ambo germina recondita, communis, et lævissimè unitus per filum sessilem, (duplicem?) mox deciduus. *Stigmata* sessilia granuliformia corneo-glandulosa nitida, tria in triangulo, ad singulum angulum styli, horum duo interna brunnea, tertium extimum, atrum, cæteris longissimè minus, (abortivum?) nudis oculis vix conspicuum. *Germina* duo styliformia conniventia exigua, parum subulata obtusa, subtus stylum tabulæformem omnino recondita, sed demum progredientia in folliculos

duos univalves uniloculares corniculiformes rectos subulatos 1–6-unciales, internè longitudinaliter denique dehiscentes. *Semina* majuscula subovata depressa marginata plumosa rufa, lanâ copiosissima tenuissimâ prælongâ sericeâ niveâ.

Obs. I greatly regret that the following account of this genus, and of the genera taken from it, should be so incomplete; owing to my not having studied these plants till recently; nor dissected a single flower of the order *Apocyneæ* till about Michaelmas last, nor before that time cultivated above fifteen or twenty Stapeliæ. They are difficult plants to grow, and, from Michaelmas to Lady-day, dislike the knife so much, that the cutting of single specimens from the larger kinds at that season will often cause them to bleed to death, unless they are taken up and dried: but the cuttings survive.

* Alatæ. *Caulibus alatim tetragonis, pubescentibus.*

grandiflora. 1. S. (Great-flower'd) ramis quadrangularibus clavatis, angulis dentatis; dentibus remotis incurvatis. Corolla magna, plana, villosa, quinquefida: laciniis lanceolatis, margine ciliatis *Masson. stap.* 13. *t.* 11.—*Hort. kew. ed.* 2. *v.* 2. *p.* 85.

Habitat C. B. S. S. ♄.

Floret Oct—Dec.

Introd. 1795.

spectabilis. 2. S. (Showy) corollæ laciniis nigris albo ciliatis, ovato-lanceolatis, a basi post medium villis longis densissimis rubris, supernè obsolete pallido striatis; apicibus nigris.

Stapelia grandiflora. Bot. magaz. 585. *exclusis synonymis.*

HABITAT C. B. S. S. ♄.

FLORET Dec.

INTROD. ante 1802.

OBS. Flores maximos septemunciales (nisi siccatos) non possideo.

S. (Ambiguous) corollæ laciniis maximis oblongo-lanceolatis hispidis; ligulis semuncialibus; exteriore ramo staminum cultriformi serrato, interiore formâ pedis.—*Stapelia ambigua. Masson's stap.* 13. *t.* 12.—*Hort. kew. ed.* 2. *v.* 2. *p.* 86. *ambigua.* 3.

HABITAT C. B. S. St. ♄.

FLORET Oct.

INTROD. 1795.

OBS. *Calycis* foliola subulata canaliculata pubescentia. *Corolla* altè 5-fida rufo-vinacea, rugis transversis saturatioribus, rarius flavo interruptis, ultra medium rufo-hirta, pilis basi glandulosis; tunc nuda; marginibus laciniarum ciliis distichis complanatis semuncialibus crebris roseis. *Ligulæ* rufæ obtusæ parum recurvæ canaliculatim concavæ, apice pallidiores. *Stamina* inæqualiter bifida rufa, exteriore ramo cultriformi præcompresso patulo obtuso internè dentatim erosulo, acie stylum spectans: interiore ramo erectiore at patulo, altiore triplo angustiore subulato, dorso plano apice recurvo. *Styli* tabula magna alba 5-angularis subrepanda. *Antheræ* cerinæ obtusæ magnæ.

S. (Sister) ramis divaricatis 4-angularibus: angulis dentatis, dentibus remotis acutis, incurvatis. Corolla unicolori 5-fida: laciniis lan- *sororia.* 4.

ceolatis planis, centro villoso, margine ciliatis. *Masson's stap.* 23. *t.* 39.

HABITAT C. B. S. St. ♄.

FLORET Jun.

INTROD. circa 1797.

reflexa. 5. * S. (Reflex-flower'd) staminibus subdeltoideis processu interiore recurvatim unguiculiforme: styli tabula cruce impressâ.—*Stapelia deflexa, Hortorum.*

HABITAT C. B. S. St. ♄.

FLORET Oct. Nov.

INTROD. circa 1805.

OBS. Præcedentibus omni parte plus duplo minor, ramis decumbenti-erectis. *Corolla* viridi-vinacea, laciniis elliptico-lanceolatis revoluto-reflexis, medio striis transversis undatis contiguis albidis; intus basin versus pilis erectis crebris longis purpureis; margine omni ciliis numerosis conspicuis roseis. *Ligulæ* sordide rufæ recurvæ inflexo-concavæ, apice cuneatæ, basi pallidiores. *Stamina* concoloria cum ligulis, processu interiori unguiculum aviculæ simulante.

** ÆQUILATERALES, *Caulibus angulis* 4, *planis æqualibus pubescentibus.*

Massoni. 6. * S. (Masson's) ramis 4-quetris magnis.—*Stapelia Massoni, Hortorum.*—Nunquam rite examinavi.

HABITAT C. B. S. St. ♄.

FLORET . . . .

INTROD. ante 1808.

OBS. Sequenti similis, at major. Flores non vidi.

Asterias. 7. S. (Star-fish) corollæ laciniis ovatis longe acuminatis, staminibus inæqualiter bifidis trun-

catulis.—*Stapelia Asterias. Masson's stap.* 14. *t.* 14.

Habitat C. B. S. St. ♄.

Floret Aug.—Oct.

Introd. 1795.

Obs. *Corolla* duplo major quam in *S. reflexa*, magisque carnosa atro-purpurea, fere ad medium lævis turgida, laciniis medio striis transversis irregularibus fractis punctisque subanastomosantibus flavescentibus: basis hirta, marginibus laciniarum altè crebrèque ciliatis, ciliis purpureis. *Ligulæ* nigræ inflexo-concavæ expansæ apice erosulæ. *Stamina* ligulis longiora, suberecta ramo extimo subdolabriformi præcompresso nigricante; ramo intimo lorato flavicante altiore triplo angustiore.

S. (Starry) *Stapelia stellaris, Hortorum.* *stellaris.*

Habitat C. B. S. St. ♄. 8.

Floret Aug. *

Introd. 1804.

Obs. Vivam possideo, absque flore. *Rami* et ramuli fere ut in præcedente, valde pubescentes.

S. (Hairy) corollis quinquefidis laciniis ovatis acutiusculis margine villosis; fundo villoso, pedunculis teretibus longitudine corollæ, ramis adscendentibus tetragonis basi floriferis. *Willd. sp. pl.* 1. *p.* 1278.—*Hort. kew. ed.* 2. *v.* 2. *p.* 85. *hirsuta.* 9.

Habitat C. B. S. S. ♄.

Floret Jun. Jul.

Cult. 1710.

S. (Hook'd) *Stapelia hamata, Hortorum.* *hamata.*

Habitat C. B. S. S. ♄. 10.

Floret . . . . *

Introd. 1805.

Obs. Vivam possideo, absque flore. *Rami* et ramuli minores, minusque pubescentes quam in S. stellari. *Flores* non vidi.

rufa. 11. S. (Red-Black) corollæ laciniis lanceolato-acuminatis; ligulis lineari-lanceolatis undatis; staminibus dilatatis inæqualiter emarginato-bifidis.—*Stapelia rufa.* *Masson's stap.* 16. *t.* 20.—*Hort. kew. ed.* 2. *v.* 2. *p.* 87.

Habitat C. B. S. S. ♄.

Floret Nov.

Introd. 1795.

Obs. *Pedunculi* conspicui, teretes villosuli coracis calami crassitie. *Calyx* 5-phyllus, foliolis basi fere unitis vel potius apice pedunculi insertis, semuncialibus, lineari-subulatis intùs inflexo-canaliculatis villosulis. *Corolla* 5-fida fere ad basin; extùs pubescens, intus atra subnitens; fundo hirsutissimo pilis longis rubro-vinaceis; laciniis reticulatim rugosis usque ad medium striis concentricis transversis undatis interruptis albo-roseis, marginibus pulcherrimè ciliatis pilis semuncialibus copiosis amœnissimè rubro-vinaceis, basi ciliarum confluente in processu tenuissimo subcartilagineo. *Ligulæ* rufo-atræ integræ undato-recurvæ inflexo-canaliculatæ. *Stamina* magna atra, apice atro-rufa, exteriore ramo brevi subdeltoideo 2–3-crenato, interiore pyramidali (plano) extùs unicrenato. *Tabula styli* 5-gona concava, cruce punctisque duobus centralibus impressis. Descriptio e senecto flore.

pulvinata. 12. S. (Cushion) ramis ramulisque tetragonis, reclinatis dentatis; corolla quinquefida, plana, medio villosa: laciniis patentissimis rugosis.

acuminatis, margine ciliatis. *Masson's stap.* 13. *t.* 13.—*Hort. kew. ed.* 2. *v.* 2. *p.* 88.
HABITAT C. B. S. S. ♄.
FLORET Sept. Oct.
INTROD. 1795.

*** *Ligulis rhombeo-oblongis cuneatisve: staminibus simplicibus subulatis, undulatis.*

OBS. 1. *Cætera ut in ultimâ sectione, at ramis duplo gracilioribus.*

OBS. 2. This section is almost a distinct genus; but as all its species agree with Stapelia in habit, and pubescence, and even in the dentition of their branches, it is best given as above.

S. (Neat) corolla prævillosa, villis simplicibus albis, ligulis cuneatis, integerrimis.—*Stapelia concinna. Masson's stap.* 15. *t.* 16? *concinna.* 13.
HABITAT C. B. S. St. ♄.
FLORET Sept. Oct.
INTROD. 1795.

OBS. 1. *Rami* 4-quetri nitidi, lente subpubescentes. Pedunculi 1—2. *Corolla* quinquefida ad medium rufescens, laciniis ovato-acuminatis, supernè striolis obsoletis transversis irregularibus pallidis. *Ligulæ* loratæ apice obtuso-cuneatæ, piceæ, basi spadiceæ. *Stamina* integra subulata, at plana, badia, ligularum longitudine.

OBS. 2. This is the Stapelia concinna of the Gardens; but Masson's figure of his *S. concinna* may be different, because he has depicted bifid, not entire stamina.

S. (Hairy-glanded) corolla prævillosa, villis obspathulatis niveis; ligulis minutis rhombeo-oblongis integerrimis.—*Stapelia glandulifera.* *glandulifera.* 14.

Donn. hort. cantab. ed. 5. *p.* 56.—*S. glanduliflora, ed.* 6. *nec Massoni.*

Habitat C. B. S. S. ♄.

Floret Oct.

Introd. ....

Obs. 1. Villi ~~ob~~spathulati numerosissimi atque longi. Rami manifestè pubescentes. *Flores* e medio ramorum supra calcaria crassa, 2-3-nati, *pedunculis* 2-3-uncialibus filiformibus debilibus hirtis. *Corolla* parvula 5-fida virescens, laciniis ovato-acuminatis, fundo, striolisque numerosis concentricis transversalibus interruptis rufis. *Ligulæ* patentes corneæ luteo-rufescentes obtusæ, supra planæ longitudine lineæ. *Stamina* simplicia subulata badia trilineāria, apicibus supra tabulam Styli conniventibus.

Obs. 2. This is the *Stapelia glandulifera* of the Gardens; but it agrees not with Masson's *glanduliflora*, neither in its pubescent and otherwise different branches, markings of the Corolla, or in its entire Stamina; his having bifid ones.

glanduliflora. 15. S. (Gland-flower'd) ramis plurimis suberectis tetragonis, angulis dentatis; dentibus erectis, acutis. Corolla plana, glandulis setaceis clavatis tecta: laciniis ovato-lanceolatis acutis patentibus. *Masson's stap.* 16. *no.* 19. *t.* 19.—*Stapelia (glanduliflora) corollis quinquefidis pilis apice glanduliferis tectis: laciniis ovatis acutis, pedunculis corolla longioribus, ramis patulis tetragonis basi floriferis. Willd. sp. pl.* 1. *p.* 1284.—*Hort. kew. ed.* 2. *v.* 2. *p.* 89.

Habitat C. B. S. S. ♄.

Floret Sept.—Nov.

Introd. 1795.

S. (Pointed) ramis pluribus suberectis tetragonis dentatis. Corolla 5-fida, plana, glabra, rugosa: laciniis caudatis, acuminatis, margine ciliatis *Masson's stap.* 15. *t.* 17. *acuminata.* 16.

HABITAT C. B. S. St. ♄.

FLORET Aug. Sept.

INTROD. 1795.

OBS. *Flores* non vidi, at *Stamina* simplicia et subulata sunt in Massoni figurâ supra citatâ: inde hujus generis est.

**** ANOMALÆ, *absque characteribus præcecedentarum. Inter has nova genera proculdubio latent, characteribus mihi ignotis.*

† OBTUSE-DENTATÆ, *ramorum obtusangulorum dentibus fere omnino obliteratis obtusissimis.*

S. (Long-peduncled) ramis plurimis divaricatis tetragonis subdentatis: pedunculis longissimis. Corolla quinquefida: laciniis lanceolatis margine revolutis: angulis fimbriatis. *Masson's stap.* 17. *t.* 21. *pedunculata.* 17.

HABITAT C. B. S. S. ♃.

FLORET Aug.

INTROD. circa 1790. An sui generis?

S. (Open) ramis plurimis divaricatis tetragonis dentatis: dentibus obtusissimis; pedunculis longiusculis. Corolla quinquefida plana: laciniis ovatis obtusis rugosis. *Masson's stap.* 23. *t.* 37. *aperta.* 18.

HABITAT C. B. S. St. ♃.

FLORET Jul. Aug.

INTROD. 1795.

S. (Branched) ramis plurimis erectis tetragonis dentatis, dentibus obtusissimis; floribus aggregatis subsessilibus: corollarum laciniis *ramosa.* 19.

lanceolatis acutis replicatis.—*Masson's stap.* 21. *t.* 32.
HABITAT C. B. S. S. ♃.
FLORET Jun.—Jul.
INTROD. 1795.

†† MAGNIDENTATÆ. *Huerniarum vel potius Piaranthi habitu, at sæpius elatiores, dentibus ramorum magnis horizontalibus deltoideis. An genus proprium? An Piaranthi species?*

arida. 20. S. (Arid) ramis plurimis erectis tetragonis dentatis: dentibus patentibus acutis, floribus solitariis pedunculatis: corollarum laciniis planis setaceis.—*Masson's stap.* 21. *t.* 33.
HABITAT C. B. S. S. ♃.
FLORET Aug.
INTROD. 1795.

incarnata. 21. S. (Flesh-colour'd) ramis erectis tetragonis dentatis: dentibus patentibus acutis. Floribus subsessilibus: Corollarum laciniis lanceolatis planis.—*Masson's stap.* 22. *t.* 34.
HABITAT ad Caput Bonæ Spei. S. ♃.
FLORET Ap. Mai.
INTROD. 1793.

parviflora. 22. S. (Small-flower'd) ramis pluribus tetragonis dentatis recurvatis. Corolla parva: laciniis angustatis planis patentibus, margine ciliatis. —*Masson's stap.* 22. *t.* 35.
HABITAT C. B. S. S. ♃.
FLORET Jun. Jul.
INTROD. 1795.

††† *Ramorum teretum tuberculis unipiliferis vel unispinuliferis.*

pilifera. 23. S. (Hair-tubercled) ramis pluribus teretibus sulcatis tuberculatis; tuberculis piliferis; flo-

ribus sessilibus solitariis.—*Masson's stap.* 17. *t.* 23.

Habitat C. B. S. S. ♃.

Floret Jun.—Aug.

Introd. 1790.—Reintrod. 1805 : at nunc iterum perdita.

An Genus proprium?

S. (Gordon's) ramis ramulisque teretibus tuberculatis: tuberculis spinosis; pedunculis solitariis. Corolla magna decemfida.—*Masson's stap.* 24. *t.* 40. *Gordoni.* 24.

Habitat C. B. S. S. ♄.

Floret ....

Introd. ante 1796.

An Genus proprium? at Corolla 5- nec 10-fida.

Obs. I have a distant recollection (unless memory greatly deceives) of having seen this extraordinary plant at Kew: and Mr. William Anderson, of Kensington Gore, and Mr. John Howard, (who have both long studied Stapelias) also think they remember to have beheld it there.

†††† *Ramis teretiusculis, tuberculis magnis, mammillæformibus, medio foliolijeris. Genus proprium?*

S. (Mammillary) corollis quinquefidis glabris: laciniis lanceolatis, pedunculis corolla brevioribus, ramis medio floriferis erectis hexagonis tuberculatis: tuberculis spinosis.—*Willd. sp. pl.* 1. *p.* 1287.—*Stapelia aphyllos ad nodos mammillaris, flosculo rubello, siliquis pendulis.—Burm. afr.* 27. *t.* 11. *mammillaris.* 25.

Habitat C. B. S. S. ♃.

Floret Jun. Jul.

Introd. 1774.

articulata. 26. S. (Jointed) articulis ramorum oblongis teretibus, reticulatim obsolete verrucosis: spinulis minutis, floribus subsessilibus, Corollis supra papillosis: laciniis triangularibus.—*Hort. kew. ed.* 1. *p.* 310.; *ed.* 2. *v.* 2. *p.* 90.—*Masson's stap.* 20. *t.* 30.

HABITAT in Africæ Australis Roggeveldt. Articuli aceto conditi comeduntur a Novaccollis, et etiam crudi ab Hottentottis. *Masson. l. c.* S. ♃.

FLORET Aug. Sept.

INTROD. 1774.

††††† OBS. *In addition to the above, there are, or were, the following species of Stapelia in the Gardens, imported, with many others, from Vienna, by T. Evans, Esq. with the following Jacquinian names.*

cordata. 27. S. (Heart-shaped) *Stapelia cordata, Hortorum.*

HABITAT C. B. S. S. ♃.

FLORET ....

INTROD. 1805.

clavigera. 28. S. (Clubbed) *Stapelia clavigera, Hortorum.*

HABITAT C. B. S. S. ♃.

FLORET ....

INTROD. 1795.

canescens. 29. S. (Hoary) *Stapelia canescens, Hortorum.*

HABITAT C. B. S. S. ♃.

FLORET ...

INTROD. 1795.

hirtella. 30. S. (Hairy) *Stapelia hirtella, Hortorum.*

HABITAT C. B. S. S. ♃.

Floret ....
Introd. 1795.

S. (Serpent-like) *Stapelia ophiuncula, Hortorum.* *ophiuncula.*
Habitat C. B. S. S. ♃. 31.
Floret ....
Introd. 1805.

GONOSTEMON.

Ligulæ distinctæ, canaliculiformes. *Stamina* rectangulatim incurva unciformia brevia.

Obs. Cætera ut in Stapeliis æquilateralibus, at ramulis 3-plo gracilioribus subdivaricatis.

G. (Divaricated) corollâ reflexâ glabrâ nitidâ, laciniis subrevolutis ciliatis—*Stapelia divaricata. Masson's stap.* 17. *t.* 22.—*Bot. mag.* 1007. *divaricata.* 1.
Habitat C. B. S. S. ♄.
Floret Aug.—Nov.
Introd. 1795.

Obs. *Flores* fasciculati irregulariter progredientes, pedunculis longitudine laciniarum. *Corolla* 5 fida extus alba intus pallidè carnea, carnosa, et carnem simulans, inodora, ciliata fere ad apices acutos luteo virides laciniarum. *Ligulæ* oblongæ rufæ, apice cuneatæ recurvæ. *Stamina* fere pediformia rufa, ligularum longitudine; inter, et ad eas adnata; basi antheris didymis magnis luteis. Inter stamina ad ipsos angulos styli tabulæformis stigmata 3, fere sessilia; duo antheræformia, spadicea, alterum nigrum nitidum fere inconspicuum punctiforme. Ex hoc puncto deorsum (lente) externè excurrit ligula oblonga minutissima bifida supra unisulcata lutea.

HUERNIA. *Brown's asclep.* 11.

Corolla acutè 10-fida inferne campanulata, laciniis alternis longissimè diminutis denticuliformibus. *Ligulæ* horizontales fundo corollæ adnatæ usque ad medium, semiconnatæ, rhombeæ emarginatæ. *Stamina* ut in Stapelia acuminata, &c, at magis undata.

OBS. 1. *Rami* subsimplices 4-5 quetri æquilaterales erecti crassi glauci nudi, (dentibus magnis horizontalibus deltoideis, basi contiguis) sæpius basi floriferi. *Calyx* 5-phyllus, foliolis setaceis carnosis.

OBS. 2. Since the above generic characters were written exactly as they now stand, and with the generic name *Decodontia*, from the ten dentiform divisions of the Corolla; Mr. Brown has lent me his paper on *Asclepiadeæ*, wherein he has defined and named this Genus *Huernia*, which is here retained. The species Mr. Brown examined were H. *campanulata*, *venusta*, and *guttata*.

reticulata. 1. H. (Netted) ramis pentagonis denticulatis dentibus patentibus. Corolla decemangulata: tubo intus barbato ampliato in orbiculum elevatum.—*Masson's stap.* 1. *t.* 2.

HABITAT C. B. S. S. ♄.

FLORET Jul. Aug.

INTROD. 1793.

Stapelia crassa. *Donn's hort. cantab. ed.* 6. *p.* 67.

campanulata. 2. H. (Bell-flower'd) corollâ sub-campanulatâ, fundo pilis clavatis horizontalibus clauso, ligulis repandatim truncatis atris.—*Stapelia campa-*

nulata. Masson's stap. 11. *t.* 16.—*Bot. mag.* 1293.—*Hort. kew. ed.* 2. *v.* 2. *p.* 95.

HABITAT C. B. S. S. ♄.

FLORET Jul.—Oct.

INTROD. 1795.

OBS. *Corolla* basi valde carnosa, extus alba punctis maculisque numerosis roseis; intus etiam alba, maculis rotundis numerosis sæpe distinctis atris, punctulisque rufo-atris lente elevatis; basin versus atro rufa, striolis obsoletis concentricis valde interruptis albis, pilisque horizontalibus distinctis claviformibus carnosis nigris numerosis fundum ipsum nitentem nigrum claudentibus. *Stamina* simplicia acutè subulata undatim-erecta atro-rufa, basi geniculata. *Tabula Styli* parva alba recondita.

H. (Showy) ramis tetragonis pentagonisque; ramulis patentissimis divaricatis glabris, denticulis ramorum patentibus acutis. Corolla decemfida: tubo glabro ampliato in orbiculum elevatum.—*Masson's stap.* 10. *t.* 3. *venusta.* 3.

HABITAT C. B. S. S. ♄.

FLORET Jun. Jul.

INTROD. 1795.

H. (Freckled) corollis 10-dentatis, laciniis alternis obsoletis, fundo concavo orbiculo elevato cincto; caulibus superne ramosis, ramis pentagonis patentibus tuberculosis; tuberculis uncinatis.—*Bot. mag.* 506. *lentiginosa.* 4.

HABITAT C. B. S. S. ♄.

FLORET Jul.—Nov.

INTROD. 1799.

An idem cum sequente?

guttata. 5. H. (Red-spotted) corollis fundo concavo, orbiculo elevato cincto, caulibus superne simplicibus glaucis, dentibus ramorum horizontalibus.—*Stapelia guttata. Masson's stap.* 11. *t.* 4.

HABITAT C. B. S. S. ♄.

FLORET Aug.—Nov.

INTROD. 1795.

OBS. *Flores* conferti ad caulium basin, brevius pedunculati. *Corolla* lutea crebrè sanguineo punctata, laciniis extus costâ elevatâ. *Orbis* prægrandis, cum fundo infundibuliformi, os obbæ rusticè simulans, pustularis, sanguineo maculatus, intus spinulis pauculis horizontalibus glanduliformibus sparsis. *Ligulæ* horizontales semiconfluentes, fissæ usque ad confluentiam, nigro-purpureæ (margine ustulato) cingulo lato medio repando stellari niveo. *Stamina* subulato-setacea undatim tortuosa alba; purpureo maculata, basi toto purpurea.

humilis. 6. H. (Humble) ramis pluribus 4—5-angulatis patentibus. Corolla orbiculata decemfida: laciniis quinque longioribus, quinque brevioribus patentibus: pedunculis solitariis.—*Masson's stap.* 3. *t* 5.—*Hort. kew. ed.* 2. *v.* 2. *p.* 96.

HABITAT C. B. S. S. ♄.

FLORET Oct.

INTROD. 1795.

tubata. 7. H. (Tube-flower'd) ramis simplicibus crassissimis 4—5 goniis, dentibus maximis.—*Stapelia tubata Hortorum.*

HABITAT C. B. S. S. ♄.

FLORET ....

INTROD. 1805.

Obs. *Rami* sæpe cristatim confluent. *Flores* non vidi. In hortis, nomine *S. crassi*, subinde occurrit. Sed non est *S. crassa*.—*Donn. hort. cantab.*

H. (Curled) ramis 4-5-gonis, simplicibus, sæpiusve confluentibus crispis, dentibus minoribus.—*Stapelia crispa Hortorum.* *crispa.* 8.

Habitat C. B. S. S. ♄.

Floret ....

Introd. 1805.

Obs. Præcedenti valde distincta, at sequenti fortè monstrosa varietas; dentibus parvulis in hoc genere. *Flores* non vidi.

H. (Bearded) corollâ campanulatâ, fauce subclausâ setis clavatis rufis; ligulis oblongo-rhombeis retusis; staminibus subulatis undatim subuncatis.—*Stapelia barbata. Masson's stap.* 11. *t.* 7.—*Hort. kew. ed.* 2. *v.* 2. *p.* 95. *barbata.* 9.

Habitat C. B. S. S. ♃.

Floret Aug.—Oct.

Introd. 1795.

Obs. Dentes ramorum minores quam in D. campanulata. *Flores* in fasciculo e basi ramorum ut in omnibus (excepta D. lentiginosa). *Corolla* flavescens 10-fida, dentibus intermediis minutissimis; basi striis concentricis rufis, parum interruptis; laciniis majoribus triangulari-acuminatis patentibus, rufo crebrè punctatis. *Ligulæ* aterrimæ. *Stamina* atro-rufa deorsum pallidiora. *Stylus* tabulæformis parvus obsoletè 5-gonus niveus, (oculo armato) cruce impressâ.

PODANTHES.

Corolla 5-fida rugulosa fundo late campanulato, orbiculo tumido cincto. *Ligulæ* connatæ ad medium, canaliculiformes rhombeæ altè emarginatæ. *Stamina* simplicia brevissima alternantia cum ligulis formâ pedis reversi, ad stylum incurvatum arctè adpressa.

Obs. Cætera ut in Stapelia: at ramis fere quadruplo gracilioribus effuso decumbentibus debilibus demum basi radicantibus, obsoletè 4-5-gonis, dentibus longè majoribus adscendentibus deltoideo-acuminatis crassis, at folio minus manifestè finientibus.

pulchra. 1. P. (Beautiful Sulphur) præramosa debilis, floribus geminatis semi-5-fidis corrugatis, fundo minutè piloso.—*Stapelia verrucosa Hortorum, sed non Massoni.*

Habitat C. B. S. S. ♄.

Floret Aug.—Oct.

Introd. ante 1800.

Obs. *Flores* longius pedunculati, ad basin ramorum superiorum. Pedunculi flexi. *Calyx* 5-phyllus, foliolis lanceolato-acuminatis, ut in affinibus. *Corollæ* laciniis deltoideo-acuminatis, extus herbaceis lineis 5 parallelis elevatiusculis saturatioribus, nec basin neque apicem attingentibus; intus sulphureis, crispo rugulosis, verrucis numerosissimis crebrè at regulariter sparsis atro-rufis, prope basin majoribus. *Orbis* parvulus rugosissimus verrucis atro-rufis crebrioribus confluentibus: Fundus etiam atro-rufus glandulosis pilis pauculis erectis præexiguis sparsis sulphureo tenuiter cinctus. *Ligulæ* atro-rufæ lucidæ, marginibus indies parum luteis. *Stamina*

medio rectangulatim incurva, acuminata formâ pedis, tabulæ styli arctè adpressa et amplectentia atro-rufa, at supra tabulam flava. *Tabula* etiam atro-rufa, basi cingulo flavo.

β. Ramis longè crassioribus.—*Stapelia verrucosa. Bot. magaz. t. 786, sed non Massoni.—Stapelia pulchella Hortorum, sed non Massoni.*

P. (Dewy) Corollis plus semi-5-fidis, rugosis irroratis.—*Stapelia irrorata. Masson's stapelia.* 12. *t.* 9.—*Hort. kew. ed.* 2. *v.* 2. *p.* 94. *irrorata.* 2.

Habitat C. B. S. S. ♄.
Floret Jul. Aug.
Introd. 1795.
Flores non vidi.

P. (Warted) ramis pluribus suberectis; dentibus ramorum acutis decussatis. Corolla plana verrucosa, medio parum elevata in pentagonum, genitalia ambiens scabrum. *Masson's stap. p.* 11. *no.* 8. *t.* 8.—*Stapelia (verrucosa) corollis quinquefidis verrucosis: laciniis ovatis acutis; fundo pentagono scabro, pedunculis corolla longioribus, ramis adscendentibus, tetragonis basi floriferis. Willd. sp. pl.* 1. *p.* 1291.—*Hort. kew. ed.* 2. *v.* 2. *p.* 94. *excluso synonymo Bot. magaz.* *verrucosa.* 3.

Habitat C. B. S. S. ♄.
Floret Aug.—Oct.
Introd. 1795.

P. (Beautiful) ramis plurimis reclinatis dentatis; dentibus acutis; floribus fasciculatis; corolla 5-fida: laciniis 3-angularibus acutis, centro orbiculato. *Masson's stap.* 22. 36. *pulchella.* 4.

Habitat C. B. S. St. ♄.
Floret Jul. Aug.

INTROD. 1795.
Flores non vidi.

lepida. P. (Pretty)—*Stapelia lepida, Hortorum.*
5. HABITAT C. B. S. S. ♄.
* FLORET ....
INTROD. 1805.
OBS. Vivam possideo; antecedenti similem, at flores non vidi.

ciliata. P? (Fringed) corollis alte ciliatis.—*Stapelia ciliata. Masson's stap.* 9. 1.—*Hort. kew. ed.* 2. *v.* 2. *p.* 85.
6. HABITAT C. B. S.
FLORET Oct.—Dec.
INTROD. 1795.
Flores non vidi.

TRIDENTEA.

Ligulæ tridentiformes. *Stamina* inæqualiter bipartita.

OBS. Habitus fere Podanthidis, sed rami nudi erectiores, dentibus minoribus, at finientibus foliolo viridi valdè manifesto.

gemmiflora. T. (Gem-flower'd) corolla crassissima corrugata atra, albo-ciliata.—*Stapelia gemmiflora. Masson's stap.* 14. *t.* 15.—*Hort. kew. ed.* 2. *v.* 2. *p.* 87.
1. HABITAT C. B. S. S. ♄.
FLORET Oct.
INTROD. 1795.
OBS. Foliola certè longiora quam in ullis. *Calyx* 5-phyllus, foliolis lineari-lanceolatis concavis. *Corolla* altè 5-fida expansa absque orbe, basi striolis concentricis undatis flavicantibus; laciniis ovato-acuminatis. *Ligulæ* tridentem simulantes, dentibus gracilibus subulatis 4-linearibus erecto-patulis canaliculatis atro-purpureis apicibus pallidis, dente medio cæteris

triplo latiore sesquilongiore, basi utrinque undatim quasi auriculato. *Stamina* bifida, exteriore ramulo breviore compresso fere triangulari acuto atro-rufo; interiore filiformi triplo longiore recurvo concolore apice albo. *Tabula Styli* recondita orbicularis parva, depressionibus 5 angulæformibus obliquis. Variat corolla toto atra.

Obs. The above description was made from a nearly decayed flower.

T. (Stygian) corollis rugosis atris, pilis rubicundis: ramis crassis brevibus, luteo-viridibus. *stygia.* 2. *

Habitat C. B. S. S. ♄.
Floret Aug.
Introd. ante 1800.

Obs. *Rami* a præcedente valde diversi; breviores, crassiores, pallidiores.

T? (Musky) *Stapelia moschata, Hortorum.* *moschata.* 3

Habitat C. B. S. S. ♄.
Floret Sept. Oct.
Introd. 1799. *Donn's hort. cant. ed.* 6. *p.* 67. *no.* 31.

Hanc speciem, vel forte varietatem, non examinavi.

T? Corollis 5-fidis glabris: laciniis ovatis acuminatis superne trinerviis, pedunculis corolla brevioribus, ramis tetragonis erectis, basi floriferis. *Hort. kew. ed.* 2. *v.* 2. *p.* 93.—*Masson's stap.* 15. *t.* 16. *vetula.* 4.

Habitat C. B. S. S. ♄.
Floret Aug.—Oct.
Introd. 1793.

Obs. *Flores* non examinavi. Habitus hujus et sequentis fere Stapeliarum æquilateralium, at absque pubescentia.

Simsii. 5. T? (Sims's) ramorum dentibus obesis, corollis inapertis ventricosis, apertis laciniis ovato-acuminatis quinquenerviis atris, ligulis luteis retuso-3-cuspidatis, staminibus divaricatim fissis, segmentis valde subulatis.—*Stapelia vetula. Bot. magaz.* 1234, *exclusis synonymis.*

HABITAT C. B. S. S. ♄.

FLORET....

INTROD. ante 1800.

OBS. I possess this plant, but having no flowers, have drawn this description from the above cited figure, which widely disagrees with the *vetula* of Masson.

TROMOTRICHE.

Corolla lævisrevoluta, ciliis trementibus spathulatis! *Ligulæ* 5, basi connatæ horizontales, cuneato-rhombeæ emarginatæ serratæve. *Stamina* inæqualiter bifida, ramo intimo recurvo longiore graciliore: apice sensim incrassato inde stigma simulante. Character ex sicco.

OBS. Habitus fere Stapeliarum æquilateralium, at ramis nudis glaucissimis, vel potius pruinosis, subinde sesquipedalibus inferne ramosis, erecto-decumbentibus, dentibus distantibus parvulis horizontalibus, s. subrecurvantibus.

revoluta. 1. T. (Revolute) ramis erectis denticulatis: dentibus patentibus, corolla glabra, laciniis ciliatis acutis revolutis. *Masson's stap.* 12. *t.* 10.—*Bot. mag.* 724.—*Hort. kew. ed.* 2. *v.* 2. *p.* 85.

HABITAT C. B. S. S. ♄.

FLORET Aug—Oct.

INTROD. 1790.

T. (Glaucous) *Stapelia glauca, Hortorum.* *glauca.*
HABITAT C. B. S. S. ♄. 2.
FLORET Aug.—Nov.
INTROD. 1799. *Donn's hort. cantab. ed.* 6. *p.* 66. *no.* 3.
OBS. Præcedenti longe elatior. *Flores* siccatos solum possideo.
β. Floribus fuscis.

T? (Plum-colour'd) ramis tetragonis dentatis: dentibus recurvatis, laciniis corollarum planis ovatis pilosis. *Masson's stap.* 24. *t.* 41. *pruinosa.* 3.
HABITAT C. B. S. S. ♄.
FLORET Jun. Jul.
INTROD. 1795.

ORBEA.

Corolla 5-fida toto internè corrugata stellaris; ante lacinias *orbe* prægrandi elevata. *Ligulæ* patulæ longæ, apice 2-3-dentatæ. *Stamina* inæqualiter bifida, ramo intimo longiore recurvo styliformi; apice clavato, stigmatiformi.

Habitus Podanthidis, ramis robustioribus minus effusis, senectis decumbenti-repentibus, dentibus minoribus horizontalibus, nec adscendentibus.

* *Ramis viridioribus, dentibus acutioribus distantioribus.*

O. (Spotted) corolla ciliata, orbe medioeri pubescente; ligulis apice subtridentatis.—*Stapelia mixta. Donn's hort. cant. ed.* 4. 5. *et* 6. *sed S. maculosa ed. prior.* *maculosa.* 1. *
HABITAT C. B. S. S. ♄.
FLORET Sept.
INTROD. ante 1804.
OBS. *Corolla* maxima altè 5-fida præcarnosa ru-

gulosa, laciniis rotundato-ellipticis sordidè flavicantibus apice margineque rubris, maculis magnis creberrimis sordidè rufis confluentibus fere tectis, præcipue basin versus; inde basis rufa evadit, striolis reticulantibus flaveolis. *Orbis* elevatus, at parvulus ratione magnæ corollæ, undatus. *Fundus* acetabuliformis. *Ligulæ* ad orbem extensæ vel plus, apice 2-3- dentatæ, fusco-griseæ, basi pallidæ maculâ distinctâ fuscâ. *Staminum* extima lacinia lorata obtusa grisea; intima longior styloidea teres recurva, supernè sensim incrassata, apice stigmatiformi punctis minutis scabris nigris. *Tabula Styli* 5-gona, stigmatibus trapeziformibus inter baseos staminum, subporrectis pullis.

Obs. *Rami* fere ut in *O. variegata*, at sesquimajores longioresque, valde ramosi decumbentes radicantes tetragoni, dentibus deltoidibus.

mixta. 2. O? (Mixed) denticulis ramorum subrecurvis, floribus pedunculatis nutantibus; corollis glabris centro orbiculo elevato papilioso: laciniis ovatis acuminatis rugosis. *Masson's stap.* 23. *t.* 38.

Habitat C. B. S. S. ♄.

"Florebat in Horto kewensi 1796." *Masson. l. c.*

Obs. This being a very distinct plant, it is difficult to say why the Authors of Hortus Kewensis have omitted to insert it, with Masson's other species, as it is recorded to have flowered in the Garden.

quinque-nervia. 3. * O. (Five-nerv'd) corolla altè 5 fida utrinque 5-nervia, ligulis, tridentatis, dente intermedio longè diminuto, ramis viridibus rufo maculatis.

HABITAT C. B. S. S. ♄.
FLORET Oct. Nov.
INTROD. ante 1810.
OBS. *O. variegata* major, *ramis* 4-gonis, dentibus magnis horizontalibus deltoidibus subdecurrentibus. *Pedunculi* 2 unciales debiles teretes. *Corolla* laciniis orbiculato ellipticis, sulphurea minus maculata quam in *O. bisulca*, supernè certis lucis utrinque maculis fusco-purpureis. *Ligulæ* luteæ basi maculâ sanguineâ; apicem versus fusco distinctè punctatæ. *Stamina* bifida fere ut in *O. bisulca*, lutea atro-rufo punctata.
OBS. *Corolla, Ligulæque* altiùs fissæ quam in *O. bisulca*, et longe pallidiores.

O. (Bisulcated) Corolla 5-fida, ligulis oblongis emarginatis: foliolis calycinis latè ovatis acuminatis, ramis crassis viridibus immaculatis. —*Stapelia bisulca: et S. trisulca. Donn's hort. cantab. ed. 6. p. 67.* *bisulca.* 4. *
HABITAT C. B. S. S. ♄.
FLORET Oct.
INTROD. ante 1806.
OBS. Flores corrugati fere ut in affinibus, sordidè lutei, maculis atro-rufis subrotundis fere tecti, præcipue basin versus. *Orbis* magnus sulphureus, maculis atro-rufis paucioribus, margine lateraliter acuto. *Ligulæ* expansæ adscendentes loratæ altè emarginatæ luteæ. basi maculâ insolidâ, (i. e. medio pallidior) atro-rufâ; apicem versus crebrè spadiceo punctatæ. *Stamina* bifida lutea atro-rufa punctis elevatis, exteriore ramo extus porrecto filiformi, interiore erecto flexo; apice incrassato stigmatiformi. *Tabula Styli* 5-angularis alba,

angulis stigmatiferis luteis. An verè a sequente distincta?

variegata. 5. O. (Variegated) Orbe prægrandi, ligulis bifurcatis.—*Stapelia variegata. Lin. sp. pl.* 316. —*Asclepias Aizoides Africana. Bradl. succ.* 3. *p.* 3. *t.* 22.—*Asclepias Aizoides aphylla, flore Fritillariæ, siliquis longis angustis erectis. Moris. hist.* 3. *p.* 610. *s.* 15. *t.* 3. *f.* 4.

Habitat C. B. S. S. ♄.

Cult. by Professor Bradley before 1727.

Curtisii. 6. O. (Curtis's) corolla sulphurea, ligulis integerrimis.—*Stapelia variegata. Curtis bot. mag.* 26. *exclusis synonymis, quæ ad antecedentem pertinent.*

Habitat C. B. S. S. ♄.

Floret Aug.

Cult. by Mr. Curtis 1787, and in Chelsea Physic Garden for ages.

orbicularis. 7. O. (Large Orb'd) ramis plurimis erecto-patentibus, tetragonis, dentatis; corollis quinquefidis, in medio orbiculatis, densissime punctatis; laciniis cordatis, rugosis, striatis, fuscatis.—*Bot. repos. vol.* 7. *t.* 448.

Habitat C. B. S. S. ♄.

Floret Jul.—Nov.

Introd. 1799.

Obs. From the above vague description it is impossible to understand this plant. I possess one alive under this name, which extremely resembles the following. But I have not flowered either.

bufonia. 8. * O. (Toad) ramis tereti-tetragonis dentibus minutis.

Habitat C. B. S. S. ♄.

FLORET Aug.
INTROD. ante 1806.
OBS. *Rami* teretiores quam in cæteris hujus generis, denticulis omnium minoribus horizontalibus. *Flores* non possideo.

** *Ramis glaucioribus, dentibus obtusioribus tumidioribus (quasi mammæformibus) magisque approximatis.*

O. (Retuse) orbe prægrandi, ligulis prælongis loratis retusis. *retusa.* 9.
HABITAT C. B. S. S. ♄.
FLORET Sept.
INTROD. ante 1808.
OBS. Rami simillimi O. *anguineæ*, paulove crassiores. *Florem* unum tantum vidi, longè pedunculatum, a ramulorum basi, 5-fidum fere ad basin, laciniis deltoidibus rugosissimis, intùs flavescentibus, maculis punctis striolisque atro-rufis; præcipuè basin versus, extus 5-nerviis ut in omnibus. *Orbis* pallidior magis rugosus, maculis paucioribus, fundo concolore. *Ligulæ* incurvæ orbe breviores retusæ, virescentes, crebris punctis rufis minutissimis. *Stamina* fere ut in *O. anguinea*, (lente) tuberculis sparsis minimis nigris.

O. (Snake) orbe magno, ligulis semipartitis. *anguinea.* 10. *
HABITAT C. B. S. S. ♄.
FLORET Aug. Sept.
INTROD. ante 1806.
OBS. *Florem* unum (morientem) solum vidi, luteum atro-rufo præmaculatum, pedunculo longo a basi ramulorum. *Orbis* maculis grandibus difformibus, genitalia versus confluentibus, atro-rufis, infernè lateribus luteis. *Stamina* bifida supernè atro-rufo punctata, altero ramo

subulato obtuso; altero revoluto apicibus obtusis stigmatiformibus.

picta. 11. O. (Painted) ramis simplicibus 4-sulcatis torulosis, corollis semi-5-fidis nudis: laciniis ovato-acuminatis rugosis; annulo orbiculari elevato rugosissimo medio depresso papuloso, nectarii infimi laciniis patentibus apice bifidis. —*Bot. mag.* 1169.

HABITAT C. B. S. S. ♄.

FLORET Sept.

INTROD. ante 1801.

OBS. Simillima præcedenti, at ramis duplo minoribus, apice roseis.

Woodfordiana. 12. * O. (Woodford's) *Stapelia Woodfordiana, Hortorum.*

HABITAT C. B. S. S. ♄.

FLORET ....

INTROD. circa 1805.

OBS. Vivam possideo absque floribus. Ultimæ, penultimæque, simillima.

OBESIA.

Orbis nullus. *Ligulæ* nullæ. *Stamina* bipartita lutea, parvula crassa truncata, apice erosula; extimo ramo patente; intimo graciliore semicylindrico, super tabulam styli arctè incurvo.

OBS. Ramorum articuli perbreves suboblongi, valde obesi obsolete angulati, radicantes, denticulis parvis horizontalibus. Flores parvuli subgeminati.

geminata. 1. O. (Twin-flower'd) ramorum articulis proliferis reptantibus subovalibus, obsolete 4-gonis, floribus sæpius geminatis.—*Stapelia gemina-*

ta. *Masson. stap.* 18. *t.* 25.—*Hort. kew. ed.* 2. *v.* 2. *p.* 95.—*Bot. mag. t.* 1326.
HABITAT C. B. S. S. ♄.
FLORET Aug.—Oct.
INTROD. 1795.
OBS. *Corolla* subcampanulato-patula 5-partita fere ad basin, absque orbe; laciniis lanceolato-acuminatis intus (in lente) brevissime hirtis punctis minutissimis rubris. *Tabula Styli* recondita flavescens 5-angularis parva.

O? (Dotted) articulis ramorum oblongis sub-4 gonis dentatis. Floribus fasciculatis; corollarum laciniis lanceolatis acutis patentibus, supra papillosis.—*Masson's stap.* 18. *t.* 24. —*Hort. kew. ed.* 2. *v.* 2. *p.* 92. *punctata.* 2.
HABITAT C. B. S. S. ♃.
FLORET Sept.
INTROD. 1795.

O? (Neat) articulis ramorum oblongis subteretibus dentatis. Floribus geminatis; corollarum laciniis lanceolatis acutis, supra scabrosis, margine revolutis. *Masson's stap.* 19. *t.* 26. —*Hort. kew. ed.* 2. *v.* 2. *p.* 93. *decora.* 3.
HABITAT C. B. S. S. ♄.
FLORET . . . .
INTROD. 1795.

PIARANTHUS. *Brown's Asclep.* 11.

Corolla campanulata, 5-fida, carnosa. *Columna fructificationis* inclusa. *Corona staminea* simplex, 5-phylla, foliolis dorso dentatis. *Antheræ* apice simplices. *Massæ pollinis* erectæ, basi affixæ, altero margine cartilagineo-pellucido. *Stigma* muticum. *Brown*, l. c.

pullus. 1. P. subhexagonus erectus aculeis patentissimis, floribus sessilibus aggregatis: corollarum laciniis lanceolatis, supra holosericeis replicatis. —*Stapelia pulla. Masson's stap.* 21. 31.—*Willd. sp. pl.* 1. *p.* 1288.—*Hort. kew. ed.* 2. *v.* 2. *p.* 92.
HABITAT C. B. S. S. ♄.
FLORET Aug. Sept.
INTROD. 1774.

DUVALIA.

Corolla laciniis ad latera, plus minus reflexis, vel arctissimè refractis. *Ligulæ* nullæ. *Stamina* minuta cava caput aviculæ nudæ simulantia; ad angulos styli incurvatim adpressa. *Tabula Styli* rotunda parum repanda, depressuris 5 angulosis.

OBS *Rami* breves proliferi fere ut in ultimo genere, at sæpe breviores et magis glomerati, valde radicantes. *Corolla* sæpius basi orbe subtiaræformi.

In memoriam H. A. Duval, auctoris enumerationis Plantarum Succulentarum in Horto Alenconio, dixi.

* *Corollis ciliatis.*

reclinata. 1. D. (Reclined) ramis pluribus 4-gonis reclinatis dentatis: dentibus acutis patentibus, corolla 5-fida recurvata; laciniis patentibus replicatis fimbriatis.—*Masson's stap.* 19. *t.* 28.—*Bot. magaz.* 1396?
HABITAT C. B. S. S. ♄.
FLORET Aug. Sept.
INTROD. 1795.

elegans. 2. D. (Elegant) ramulis sesquiuncialibus densis, laciniis corollæ deltoideo-acuminatis subre-

flectentibus intus hirsutis.—*Stapelia elegans. Masson's stap.* 19. *t.* 27.—*Bot. magaz.* 1184.

HABITAT C. B. S. S. ♄.
FLORET Aug.—Oct.
INTROD. 1795.

OBS. *Caules* tereti-4-goni, plus minus purpurascentes denticulis senectis horizontalibus obsoletis subdeltoidibus, aristâ obsoletâ minutâ terminatis. *Flores* glomerati variè progredientes. *Pedunculi* teretes subunciales inæquales deflexi purpurascentes. *Corolla* atro-purpurea, orbe parvo nitente intùs pilis longis purpureis vestita. *Tabula Styli* rotunda nuda orbe pallidior (lente optimo) minutissimè et creberrimè asperata.

D. (Tufted) ramorum articulis vix uncialibus densissime confertis, laciniis corollæ retrofractim conniventibus, orbe, tabula, staminibusque viridibus.—*Stapelia cæspitosa. Masson's stap.* 20. *t.* 29.—*Hort. kew. ed.* 2. *v.* 2. *p.* 88. *cæspitosa.* 3.

HABITAT C. B. S. S. ♄.
FLORET Aug.—Nov.
INTROD. 1790.

OBS. Cauliculi cæspitosi suboblongi obsoletè pentagoni, denticulis ut in R. elegante. *Corollæ* laciniæ acuminatæ nudæ lateribus ciliis albis, a basi post medium. *Stamina* paulo pallidiora quam *Tabula Styli*, minora quam in R. elegante. *Stigmata* brunneo-varia.

β. Corolla aliquantillum pallidior.

** *Corollis omnino depilatis.*

D. (Radiated) ramis confertis brevibus; dentibus conicis acutis, corollæ laciniis distantibus *radiata.* 4.

replicatis nudis: fundo elevato tiaræformi, pedunculis geminis. *Bot. magaz.* 619.
HABITAT C. B. S. S. ♄.
FLORET Sept. Oct.
INTROD. 1795.

tubercu-lata. 5. * D. (Tubercled) *Stapelia tuberculata, Hortorum.*
HABITAT C. B. S. S. ♄.
FLORET Jul.—Nov.
INTROD. 1774.
OBS. Præcedente paulo minor, et paulo pallidior magis angulata. Vivam possideo, at flores non vidi.

lævigata. 6. * D. (Smooth) *Stapelia lævigata, Hortorum.*
HABITAT C. B. S. S. ♄.
FLORET ....
INTROD. ante 1808.
OBS. Vivam possideo, sed flores non vidi.

glomerata. 7. * D. (Glomerated) *Stapelia glomerata, Hortorum.*
HABITAT C. B. S. S. ♄.
FLORET ....
INTROD. ante 1808.
OBS. Vivam possideo, sequenti similis at flores non vidi.

compacta. 8. * D. (Compact) ramorum articulis uncialibus densissime glomeratis, laciniis corollæ atro-purpureis, retrofractim conniventibus; tabula styli staminibusque brunneis.
HABITAT C. B. S. S. ♄.
FLORET Aug.—Nov.
INTROD. ante 1800.
OBS. *Stamina* simulantia capita avicularum, paululum pallidiora quam tabula Styli. *Stigmata* atro-purpurea variantia. Cætera ut in prioribus.

CARALLUMA. *Brown's Asclep.* 14.

Corolla rotata profundè 5-fida. *Columna fructificationis* exerta. *Corona staminea* simplici serie 10-phylla; foliolis quinque antheris oppositis indivisis; reliquis bipartitis, subulatis. Antheræ apice simplices. *Massæ pollinis* erectæ, basi affixæ, marginibus simplicibus. Stigma muticum. Folliculi graciles, læves. *Semina* comosa. Habitus fere Stapeliæ. *Brown.* l. c.

C. (Ascending) ramulis distantibus tetragonis elongatis gracilibus adscendentibus, apice flores solitarios gerentibus: angulis denticulatis. —*Stapelia adscendens. Roxb. coromand. v.* 1. *p.* 28. *t.* 30. *adscendens.* 1.

HABITAT in Ind. Or. S. ♄.

FLORET ....

INTROD. 1804.

OBS. *Carallum* of the Talingas. *Root* fibrous. *Stems* several, perennial, succulent, about a foot or two high; at the base they rest on the ground, and strike root; above erect, four-sided: angles blunt, notched. *Branches* erect like the stems. *Leaves* alternate, sessile on the angles of the branches, lanced, very minute. *Flowers* axillary, about the extremities of the branches, peduncled, generally single, erect, small, variegated with dark purple and yellow. *Calyx* to the bottom five-cleft: divisions lanced. *Roxb.* l. c.

C. (Umbell'd) ramulis sub-confertis brevibus tetragonis crassis erectis, angulis dentatis: floribus dense capitatis terminalibus. *umbellata.* 2.

HABITAT in Ind. Or. S. ♄. *

Floret ....
Introd. 1804.

CHENOPODIUM. (Goosefoot.)
Gen. pl. 435.

Cal. 5-phyl. 5-gonus. *Cor.* 0. *Sem.* 1, lenticulare, superum.

maritimum. 1. C. (Sea) foliis subulatis carnosis semiteretibus, floribus glomeratis axillaribus. *Willd. sp. pl.* 1. *p.* 1307.—*Eng. bot.* 633.
Habitat in Angliæ maritimis. H. ⊙.
Floret Aug.

SALSOLA. (Salt-wort.) *Gen. pl.* 437.
Calyx 3-phyllus. *Cor.* 0. *Caps.* 1-sperm. *Sem.* cochleatum.

fruticosa. 1. S. (Shrubby) fruticosa, foliis carnosis teretibus obtusis imbricatis. *Willd. sp. pl.* 1316.—*Eng. bot.* 635.
Habitat in Anglia. H. ♄.
Floret Aug.

TRIGYNIA.

BASELLA. *Gen. pl.* 520.
Cal. 0. *Cor.* 7-fida: laciniis 2 oppositis latioribus, tandem baccata. *Sem.* 1.

rubra. 1. B. (Red) foliis planis, pedunculis simplicibus. *Willd. sp. pl.* 1. *p.* 1513.
Habitat in Ind. Or. St. ♂.
Floret Jul.—Nov.
Cult. 1731.

alba. 2. B. (White) foliis ovatis undatis, pedunculis simplicibus folio longioribus. *Willd. sp. pl.* 1. *p.* 1514.

Habitat in Ind. Or. St. ♂.
Floret Jul.—Nov.
Cult. 1688.

B. (Shining) foliis subcordatis, pedunculis confertis ramosis. *Willd. sp. pl.* 1. *p.* 1514. *lucida.* 3.
Habitat in Ind. Or. St. ⊙.
Floret Jul.—Oct.
Introd. 1802.

B. (Heart-leav'd) foliis cordato-subrotundis, pedunculis simplicibus folio brevioribus. *Persoon. synops.* 1. 331. *cordifolia.* 4.
Habitat in Ind. Or. St. ⊙.
Floret Aug.—Oct.
Introd. circa 1802.

PORTULACCARIA. *Gen. pl.* 522.

Cal. 2-phyllus. *Petala* 5. *Sem.* 1. alato-triquetrum.

P. (Purslane Tree) caule ramoso crasso ramulisque articulatis, foliis rotundis carnosis.—*P. afra. Willd. sp. pl.* 1. 1515.—*Plant. grass.* 132. *afra.* 1.
Habitat in Africa. S. ♄.
Floret ....
Introd. 1732.

TELEPHIUM. *Gen. pl.* 515.

Cal. 5-phyllus. *Petala* 5, receptaculo inserta. *Caps.* 1-locularis, 3-valvis.

T. (True Orpine) foliis alternis. *Willd. sp. pl.* 1. *p.* 1506.—*Hort. kew. ed.* 2. *v.* 2. *p.* 173. *Imperati.* 1.
Habitat in Gallia, Italia. H. ♃.
Floret Jun.—Aug.
Cult. 1658.
Obs. This Genus is admitted on account of its close affinity to the Portulaccæ.

PENTAGYNIA.

LAROCHEA.

Cal. 1-phyllus, 5-fidus. *Cor.* 1. Petala infundibuliformis, 5-fida. *Squamæ* 5 ad basin germinis. *Caps.* 5. *Plant. grass.* cum icone.

falcata. 1. L. (Falcated) foliis oppositis subconnatis glabris, in falcem reflexis. *Pl. grass.*—*Crassula obliqua. Haworth in bot. rep.* 414. (*exclus. synon.*)
HABITAT C. B. S. S. ♄.
FLORET Aug.—Oct.
INTROD. circa 1805.

coccinea. 2. L? (Scarlet) foliis ovatis planis cartilagineo-ciliatis, basi connato-vaginantibus. *Willd. sp. pl.* 1. 1547.—*Cras. coccinea. Burm. afr. t.* 23. *f.* 1.—Cotyledon africana frutescens flore umbellato coccineo. *Comm. rar.* 24. *t.* 24.
HABITAT C. B. S. S. ♄.
FLORET Jun.—Aug.
INTROD. circa 1810.
β. floribus albis. *Brad. succ. t.* 50.

cymosa. 3. L? (Cymose) foliis linearibus cartilagineo-ciliatis connato-vaginantibus, caule fruticoso, cyma terminali. *Willd. sp. pl.* 2. 1548.—*Cras. cymosa.*
HABITAT C. B. S. S. ♄.
FLORET Aug.
INTROD. circa 1800.

flava. 4. L? (Yellow) foliis planis connato-perfoliatis lævibus, floribus corymboso-paniculatis. *Willd. sp. pl.* 2. 1548.—*Cras. flava. Burm. afr. t.* 23. 2.

HABITAT C. B. S. S. ♄.
FLORET Aug. Sept.
INTROD. circa 1802.

L? (Sweet-scented) foliis lineari-lanceolatis cartilagineo-ciliatis basi connato-vaginantibus, floribus capitatis. *Kenn. in bot. rep. t.* 26.—*Cras. odoratissima.* *odoratissima.* 5.
HABITAT C. B. S. S. ♄.
FLORET Jun. Jul.
INTROD. 1793.

CRASSULA. *Gen. pl.* 593.

Cal. 5-phyllus. *Petala* 5. *Squamæ* 5. nectariferæ ad basin germinis. *Caps.* 5.

** Frutescentes, foliis subulatis.*

C. (Perfoliate) foliis lanceolato-subulatis sessilibus connatis canaliculatis: subtus convexis. *Willd. sp. pl.* 2. 1549. *perfoliata.* 1.
HABITAT C. B. S. S. ♄.
FLORET Aug. Sept.
CULT. 1725.
α. floribus coccineis.
β. floribus albis.

C. (Branching) fruticosa, foliis subulatis supra planis connato-perfoliatis lævibus patentissimis, pedunculis elongatis, floribus cymosis. *Hort. kew. ed.* 2. *v.* 2. *p.* 191. *ramosa.* 2.
HABITAT C. B. S. S. ♄.
FLORET Jul. Aug.
INTROD. 1774.

C. (Square) foliis subincurvis obsolete tetragonis patentibus, caule erecto arborescente radicante. *Willd. sp. pl.* 1. 1551.—*Plant. grass.* 19.—*Brad. succ. t.* 41. *tetragona.* 3.

HABITAT C. B. S. G. H. ♄.
FLORET Aug.
INTROD. 1714.

mollis. 4. C. (Soft) foliis semicylindraceis acutis subtus gibbis lævibus suberectis, cymis terminalibus compositis. *Willd. sp. pl.* 1. 1551.
HABITAT C. B. S. S. ♄.
FLORET Aug.
INTROD. 1774.

acutifolia. 5. C. (Acute-leav'd) foliis oppositis carnosis tereti-subulatis patentibus, cyma parva pedunculata. *Persoon. synops.* 339.—*Pl. grass. cum icone.*
HABITAT in Grecia? G. H. ♄.
FLORET Sept.—Nov.
INTROD. ante 1795.

** *Frutescentes, foliis latioribus lævibus.*

arborescens. 6. C. (Tree) foliis subrotundis carnosis supra punctatis, caule arboreo. *Hort. kew. ed.* 1.—*Bot. mag.* 384.—*C. arborescens. Mill. dict. ed.* 8.—*Hort. kew. ed.* 2. *v.* 2. *p.* 193.—*Willd. sp. pl.* 1. 1554.
HABITAT C. B. S. G. H. ♄.
FLORET Mai. Jun.
CULT. 1739.

obliqua. 7. C. (Oblique) foliis oppositis ovatis obliquis integerrimis acutis distinctis margine subcartilagineis. *Willd. sp. pl.* 1. 1553—*Crassula Portulacea. Pl. grass.* 79.
HABITAT C. B. S. S. ♄.
FLORET Apr. Mai.
CULT. 1759.

lactea. 8. C. (White-flower'd) caule fruticoso, foliis ovatis basi attenuatis connatis integerrimis intra

marginem punctatis cymis paniculæformibus. *Willd. sp. pl.* 1. *p.* 1554.—*Hort. kew. ed.* 2. *v.* 2. *p.* 193.—*Plant. grass. cum icone.*
HABITAT C. B. S. G. H. ♄.
FLORET Jan.
INTROD. 1774.

*** *Frutescentes, foliis latioribus distantibus, subciliatis.*

C. (Ciliated) foliis oppositis ovalibus planius- *ciliata.*
culis distinctis ciliatis, corymbis terminalibus. 9.
Willd. sp. pl. 1. 1558.—*Plant. grass.* 7.—
Dill. elth. p. 98. *f.* 116.
HABITAT C. B. S. G. H. ♄.
FLORET Jul. Aug.
CULT. 1732.

C. (Wave-leav'd) foliis connatis ovatis expan- *undula-*
sis cartilagineo-crenatis, summis ovato-ellip- *ta.*
ticis undulato-incurvis, caule dichotomo suf- 10.
fruticoso. *Haworth. misc. nat.* 176. 3. *
HABITAT C. B. S. S. ♄.
FLORET Aug.—Nov.
INTROD. circa 1797.

C. (Rough) foliis oppositis patentibus connatis *scabra.*
scabris ciliatis, caule retrorsum scabro. 11.
Willd. sp. pl. 1. 1549.
HABITAT C. B. S. G. H. ♄.
FLORET Jun. Jul.
CULT. 1730.

C. (Double-convex) foliis linearibus obtusis *bicon-*
vaginantibus utrinque convexis cartilagineo- *vexa.*
ciliatis, floribus cymosis, caulibus decumben- 12.
tibus. *Haworth. misc. nat.* 176. 2. *
HABITAT C. B. S. S. ♃.

Floret Aug.
Introd. circa 1800.

**** *Frutescentes, foliis latioribus densissimè imbricatis.*

columnaris. 13. C. (Columnar) caule pollicari, foliis rotundis imbricatis, fasciculo florum subrotundo terminali. *Willd sp. pl.* 1. 1557.—*Euphorbium aphyllum, &c. Burm. afr. t.* 9. *f.* 2.
Habitat C. B. S. S. ♄.
Floret ....
Introd. 1789.

imbricata. 14. C. (Whipcord) foliis ovatis acutis 4-fariam imbricatis lævibus, floribus axillaribus sessilibus. *Willd. sp. pl.* 1. 1552.
Habitat C. B. S. G. H. ♄.
Floret Jul.
Introd. circa 1760.

***** *Foliis latis, nec subulatis, altè perfoliatis.*

perfilata. 15. C. (Filed) foliis connato-perfoliatis cordatis punctatis. *Scop. del. insul.* 3. *t.* 6. C.—*Crassula perfossa. Plant. grass. cum icone.*—*Crassula punctata. Mill. dict. ed.* 8.—*Crassula connata. Donn's cant. ed.* 6. 79. 5.
Habitat C. B. S. S. ♄.
Floret Sept.
Cult. circa 1785.
Obs. Caules lignosi tenues diffuso-prostrati, undique foliis glaucis vix distantibus horizontalibus perfilatis subtus convexis instructi. Rarissimè variat foliis alternis perfilatis.

punctata. 16. C. (Dotted) foliis oppositis ovatis punctatis ciliatis: inferioribus oblongis. *Willd. sp. pl.* 1. 1551.—*Hort. kew. ed.* 2. *v.* 2. *p.* 193. *excluso*

synonymo Milleri, quod potius ad præcedentem pertinet.

HABITAT C. B. S. S. ♄.

FLORET Ap.—Aug.

CULT. 1759. *Hort. kew. l. c.*

C. (Dotted-edged) caule fruticoso, foliis cordatis perfoliatis acuminatis planis patentibus intra marginem punctatis. *Willd. sp. pl.* 1. 1553. *marginalis.* 17.

HABITAT C. B. S. G. H. ♄.

FLORET Aug.

INTROD. 1774.

* C. (Pellucid) caule flaccido repente, foliis oppositis. *Willd. sp. pl.* 1. 1564.—*Dill. elth. t.* 100. *f.* 119. *pellucida.* 18.

HABITAT C. B. S. G. H. ♄.

FLORET Jun.—Sept.

CULT. 1732.

****** *Foliis petiolatis.*

C. (Notch-leav'd) foliis petiolatis cordato-subrotundis acutiusculis crenatis, corymbis paniculæformibus. *Willd. sp. pl.* 1. 1553.—*Plant. grass. cum icone.* *spathulata.* 19.

HABITAT C. B. S. G. H. ♄.

FLORET Jul.—Nov.

INTROD. 1774.

C. (Heart-leav'd) caule fruticoso, foliis petiolatis cordatis obtusis integerrimis, cymis paniculæformibus. *Willd. sp. pl.* 1. 1553.—*Plant. grass. cum icone.* *cordata.* 20.

HABITAT C. B. S. S. ♄.

FLORET Aug. Sept.

INTROD. 1774.

******* *Herbaceæ, scapis radicalibus.*

tomentosa. 21. C. (Tomentose) villoso-scabra, foliis connatis lanceolatis villosis ciliatis, caule subnudo terminato spica verticillata. *Willd. sp. pl.* 1. 1563.—*C. foliis connatis lanceolatis villosis ciliatis, caule subaphyllo, floribus verticillatis. Thunb. prod.* 56.

HABITAT C. B. S. St. ♄.
FLORET Apr. Mai.
INTROD. 1790.

linguæfolia. 22. * C. (Tongue-leav'd) foliis infimis distinctis oppositis linguæformibus ciliatis pubescentibus, floribus verticillatis confertis sessilibus, caule folioso. *Haworth. misc. nat.* 175. 1.

HABITAT C. B. S. S. ♃.
FLORET Aug.
INTROD. ante 1803.
OBS. Forte mera varietas præcedentis, at foliis minus villoso-scabris, scapoque valde folioso.

Cotyledon. 23. C. (Cotyledon) foliis connatis oblongis tomentosis ciliatis, caule subnudo, floribus corymbosis aggregatis. *Linn. supp.* 190—*Willd. sp. pl.* 1. 1558.

HABITAT C. B. S. S. ♃?
FLORET ....
INTROD. ante 1800.
OBS. Semel vidi crescentem, regio horto Kewense.

orbicularis. 24. C. (Starry) sarmentis proliferis determinate-foliosis, foliis patentissimis imbricatis. *Willd. sp. pl.* 1. 1563.—*Plant. grass. cum icone.*

HABITAT C. B. S. G. H. ♃.
FLORET Jul.—Nov.
CULT. 1731.

******** *Annuæ s. biennes.*

C. (Orange-flower'd) foliis connatis oblongis remotis planis, caule simplici, cyma composita, pedicellis retrofractis. *Willd. sp. pl.* 1. 1555. *retroflexa.* 25. †
HABITAT C. B. S. G. H. ☉.
FLORET Jun.
INTROD. 1788. *Hort. kew. ed.* 2. *v.* 2. *p.* 194. 20.

C. (Channel'd) caule herbaceo, foliis cordatis sessilibus, pedunculis subterminalibus axillaribus approximatis umbellæformibus. *Willd. sp. pl.* 1. *p.* 1555. *lineolata.* 26. †
HABITAT C. B. S. D. S. ♂.
FLORET Jun.—Aug.
INTROD. 1774, *Hort. kew. ed.* 2. *v.* 2. *p.* 194.

C. (Centaury-flower'd) caule herbaceo dichotomo, foliis sessilibus oblongo-ovatis cordatis planis, pedunculis axillaribus unifloris. *Willd. sp. pl.* 1. 1555. *centauroides.* 27. †
HABITAT C. B. S. D. S. ♂.
FLORET Mai. Jun.
INTROD. 1774, *Hort. kew. ed.* 2. *v.* 2. *p.* 194.

C. (Forked) caule herbaceo dichotomo, foliis sessilibus ovato-oblongis canaliculatis recurvatis, pedunculis axillaribus unifloris. *Willd. sp. pl.* 1. *p.* 1555. *dichotoma.* 28. †
HABITAT C. B. S. D. S. ☉.
FLORET Jun. Jul.
INTROD. 1774, *Hort. kew. ed.* 2. *v.* 2. *p.* 195.

C. (Rough, cluster'd) caule valde dichotomo scabro, foliis lanceolato-linearibus, floribus ultimis fasciculatis, caule scabrido.—*Crassula* *glomerata.* 29.

scabra, α. Willd. sp. pl. 1556.—*Hort. kew. ed. 2. v. 2. p.* 195.

HABITAT C. B. S. G. H. ⊙.

FLORET Aug.—Oct.

INTROD. 1774, at postquam periit. Reintroduxit communicavitque amicus Dom. Beak, 1811.

OBS. Caules scabri nec pubescentes. A semine crescit sine variatione.

glabra. 30. * C. (Smooth, cluster'd) caule dichotomo pubescente, foliis lineari-lanceolatis, floribus ultimis fasciculatis.—*Crassula glomerata, β. Willd. sp. pl.* 1556.—*Hort. kew. ed. 2. v. 2. p.* 195.

HABITAT C. B. S. G. H. ⊙.

FLORET Jun.—Nov.

INTROD. 1774.

OBS. Præcedente triplo major. Folia sæpe reflexa. A semine semper crescit sine variatione.

Alooides. 31. † C. (Aloe-like) foliis ovatis distinctis acutis ciliatis, caule simplici pilosiusculo, racemo composito: ramis paniculæformibus. *Willd. sp. pl.* 1. 1557.

HABITAT C. B. S. D. S. ♂.

FLORET Jun.—Aug.

INTROD. 1774, *Hort. kew. ed. 2. v. 2. p.* 195.

capitella. 32. † C. (Square-spik'd) foliis oblongo-lanceolatis acutis, caule lævi, racemo elongato: floribus fasciculatis subsessilibus. *Willd. sp. pl.* 1. 1558.

HABITAT C. B. S. D. S. ♂.

FLORET Jul. Aug.

INTROD. 1774, *Hort. kew. ed. 2. v. 2. p.* 196.

C. (Annual red) foliis fusiformibus subdepressis, cyma quadrifida foliosa, floribus sessilibus, staminibus reflexis. *Willd. sp. pl.* 1. *p.* 1560. —*Plant grass. cum icone.—Hort. kew. ed.* 2. *v.* 2. *p.* 196. *rubens.* 33.

HABITAT in Italia, et Helvetia. H. ☉.

FLORET Mai.—Aug.

CULT. 1759.

C. (Whorl-flower'd) caule herbaceo, foliis patentibus, floribus verticillatis aristatis. *Willd. sp. pl.* 1. 1561. *verticillaris.* 34. †

HABITAT in Europa Australi. H. ☉.

FLORET Jul.

INTROD. 1774, *Hort. kew. ed.* 2. *v.* 2. *p.* 196.

C. (Awl-leav'd) foliis semicylindrico-subulatis, supra canaliculatis patentibus, pedunculis axillaribus solitariis unifloris, caulibus dichotomis. *Willd. sp. pl.* 1. 1561. *expansa.* 35. †

HABITAT C. B. S. D. S. ☉.

FLORET Jun. Jul.

INTROD. 1774, *Hort. kew. ed.* 2. *v.* 2. *p.* 197.

C. (Alternate-leav'd) foliis alternis subspathulatis acutis integerrimis, racemo composito. *Willd. sp. pl.* 1. 1774. *sparsa.* 36. †

HABITAT C. B. S. D. S. ♂.

FLORET Jul.

INTROD. 1774, *Hort. kew. ed.* 2. *v.* 2. *p.* 197.

C. (Diffuse) foliis oblongis basi attenuatis remote crenatis, pedunculis oppositifoliis axillaribusque solitariis. *Willd. sp. pl.* 1. 1564. *diffusa.* 37. †

HABITAT C. B. S. D. S. ☉.

FLORET Jul.

INTROD. 1774, *Hort. kew. ed.* 2. *v.* 2. *p.* 197.

moscha-ta. 38. C. (New-Holland) foliis lineari-lanceolatis carnosis, floribus tetrandris.—*Crassula moschata, caule herbaceo-procumbente foliis connato-oblongis acutis, pedunculis axillaribus unifloris, floribus tetrandris.* *Willd. sp. pl.* 1. 1561?

HABITAT in Nova Hollandia. G. H. ⊙.

FLORET Mai.—Nov.

INTROD. 1794.

OBS. Facies Tillææ. *Caules* senecti pene semipedales decumbentes tenues, ramis numerosis, sæpe patulis, plerumque oppositis. *Folia* tenuiter perfoliata, horizontalia, 2-3-linearia viridia, vel indies plus minus rufa. *Pedunculi* axillares uniflori fasciculatim verticillati, primò perbreves, denique folio longiores, capillares effusi. Cætera non examinavi. Forsan Tillææ propria species: vel potius Genus proprium.

GLOBULEA.

Corolla petala 5, inaperto-erecta, apice globulum cernuum ferentia. Cætera Crassulæ.

OBS. Flores corymbosi demum capitulati. *Folia* crassa inferne convexa, altero margine longe tenuiore acieformi, inde cultrata.

cultrata. 1. G. (Sharp-leav'd) foliis oppositis obovatis subcultratis obliquis connatis integerrimis. *Willd. sp. pl.* 1. 1552.—*Cras. cultrata. Hort. kew. ed.* 2. *v.* 2. *p.* 192.—*Dill. elth. t.* 97. *f.* 114.

HABITAT C. B. S. G. H. ♄.

FLORET Jul. Aug.

CULT. 1732.

obvalla-ta. 2. G. (Houseleek-leav'd) foliis oppositis sublanceolatis cultratis approximatis. *Willd. sp. pl.* 1. 1552.—*Cras. obvallaris.*

HABITAT ad Caput Bonæ Spei. G. H. ♃.
FLORET Jul. Aug.
CULT. 1795, *Hort. kew. ed. 2. v. 2. p.* 193.—*Plant. grass. cum icone.*
OBS. Folia omnia radicalia decussatim imbricata, ciliata crassè cultriformia, altero margine longe attenuata.

G. (Grey) foliis omnibus radicalibus decussatim imbricatis ciliatis lorato-lanceolatis flexis cultratis pubescenti canescentibus. *canescens.* 3. *
HABITAT C. B. S. G. H. ♃.
FLORET Aug.
INTROD. circa 1800.
OBS. Ultimæ simillima, at folia longiora angustiora valde flexa; canescentia; præcipue juniora. Sequenti nimis forte affinis.

G. (Naked-stem'd) foliis subulatis radicalibus, caule nudo. *Willd. sp. pl.* 1. 1562.—*Cras. nudicaulis. Plant. grass. cum icone.* *nudicaulis.* 4.
HABITAT C. B. S. D. S. ♃.
FLORET Verno, Autumnoque.
CULT. ante 1732, *Hort. kew. ed. 2. v. 2. p.* 197.

SEPTAS. *Gen. pl.* 633.

Calyx 2-partitus. *Petala* 7. *Germina* 7. *Caps.* 7, polyspermæ.

OBS. Radices tuberosæ, quotannis quiescentes; *folia* rotundata carnosa, caulina perfoliata.

G. (Cape) foliis oppositis connatis spathulato-orbiculatis crenatis, floribus terminalibus umbellatis.—*Crassula capensis. Willd. sp. pl.* 2. 292.—*Crassula Septas foliis connatis crenatis subrotundis, caule subaphyllo umbellife-* *capensis.* 1.

ro. Thunb. prod. 57.—*Trientalis foliis subrotundis crenatis. Roy. lugdb.* 538.

Obs. Thunberg has reduced this genus to Crassula; but as the tuberous, and periodically quiescent root, and whole œconomy of the plant differ from genuine Crassulæ, it is better to remain as a genus; although I have observed the number of the stamina, &c. vary from 5 to 7. Any strong deviation in the external appearance of plants, from their nearest kindred, is usually accompanied by some corresponding diversity in their fructifying organs. Crassula umbella of Jacquin is subjoined as a second species. Both resemble in habit Cotyledon Umbilicus and C. lutea.

umbella. 2. S. (Skreen) Scapi foliis duobus subcucullatis connatis in orbiculum subtrientalem: floribus cymoso-paniculatis, numerosis parvis.—*Crassula umbella. Jacq. hort. vindob. v.* 2. *t.* 352.

Habitat C. B. S. S. ♃.

Floret Jul.

Obs. Circa annum 1800, vidi pulchrè crescentem atque florentem, regio horto Kewense.

Classis VI.

HEXANDRIA

MONOGYNIA.

TRADESCANTIA. *Gen. pl.* 543.

Cal. 3-phyllus. *Petala* 3. *Filamenta* villis articulatis. *Caps.* 3-locularis. *Sem.* papilla embryotega instructa.

T. (Thick-leav'd) erecta, foliis ovatis margine et subtus lanatis, floribus umbellato-congestis terminalibus. *Willd. sp. pl.* 2. 17.—*Salisb. parad.* 59. *crassifolia.* 1.

Habitat in Mexico. St. ♃.

Floret Jul.—Nov.

Introd. 1796.

PHALANGIUM.

Cor. 6-petala, patens. *Filamenta* nuda s. glabra. *Caps.* ovata. *Sem.* angulata. *Radices* plerumque fibrosæ, aut fasciculatæ. *Folia* plana. *Flores* in plurimis albi aut purpurascentes. *Pers. synop.* 367.

P. (Curl-flower'd) foliis trigonis scabris, scapo ramoso, corollis revolutis. *Willd. sp. pl.* 2. 138.—*Bot. magaz.* 1044. *revolutum.* 1.

Habitat C. B. S. G. H. ♃.

Floret Sept.

Cult. 1731.

Obs. Folia erecto-effusa pedalia valde angusta compressa scabra succulenta.

ANTHERICUM.

Filamenta barbata erecta, cætera *Phalangii. Folia* fistulosa, sæpe succulenta. *Persoon. synops.* 369.

Alooides. 1. A. (Aloe-leav'd) foliis carnosis linguæformi-lanceolatis, utrinque planiusculis. *Willd. sp. pl.* 2. 143.—*Bot. mag.* 1317.—*Plant. grass. cum icone.*

HABITAT C. B. S. G. H. ♃.
FLORET Jul.—Oct.
CULT. 1732.

frutescens. 2. A. (Shrubby) foliis carnosis teretibus, caule fruticoso erecto ramoso. *Willd. sp. pl.* 2. 142.—*Bot. magaz.* 816.

HABITAT C. B. S. G. H. ♄.
FLORET Jun.—Oct.
INTROD. 1702.

pugioniforme. 3. A. (Dagger-leav'd) foliis carnosis linearibus acuminatis canaliculatis, scapo foliis duplo longiore. *Willd. sp. pl.* 2. 144.—*Jacq. hort. vind. t.* 405.

HABITAT C. B. S. G. H. ♃.
FLORET Ap.—Jun.
INTROD. 1793.

longiscapum. 4. A. (Long-scap'd) foliis carnosis subciliatis semiteretibus flexuosis glaucis, scapo triquetro brevioribus. *Willd. sp. pl.* 2. 145.—*Jacq. hort. vind. t.* 404.—*Bot. magaz.*—*A.* (*favosum*) *foliis carnosis semiteretibus scapo brevioribus, racemo erecto longissimo. Thunb. prod.* 63 ?

HABITAT C. B. S. G. H. ♃.
FLORET Jun.—Aug.
CULT. ante 1791.
OBS. *Folia* glauca marginibus integerrimis.

A. (Asphodel) foliis carnosis lineari-subulatis semiteretibus strictis. *Willd. sp. pl.* 2. 144. —*Jacq. hort. vind. v.* 2. *t.* 181. *Asphodeloides.* 5.
Habitat C. B. S. G. H. ♃.
Floret Jun.—Aug.
Cult. 1759.

A. (Annual) foliis carnosis subulatis teretiusculis, scapo subracemoso. *Willd. sp. pl.* 2. 145.—*Hort. kew. ed.* 2. *v.* 2. *p.* 270. *annuum.* 6.
Habitat C. B. S. H. ☉.
Floret Jun.—Sept.
Cult. 1731.

SANSEVIERA.

Cor. infera monopetala; tubo filiformi, limbo 6-partito, revoluto. *Stam.* limbo inserta. *Bacca* 1-sperma.—*Persoon. synopsis*, 1. 372.

* Latifoliæ. *Foliis latè lanceolato-ensiformibus, absque venis.*

S. (Spreading glaucous foliis subundecim patulis, subflaccidis, latè lanceolato-ensiformibus glaucis, obsoletè fasciatis. *glauca.* 1. *
Habitat .... S. ♃.
Floret ....
Introd. ....

S. (Upright glaucous) foliis sub-19 suberectis rigidis subfragilibus, latè lanceolato-ensiformibus glaucis, obsoletè fasciatis. *polyphylla.* 2. *
Habitat .... S. ♃.
Floret....
Introd. ....

S. (Guinea) foliis subtribus suberectis latè lanceolato-ensiformibus viridibus valde fasciatis. —*Sanseviera guineensis. Pers. syn.* 1. 372.— *guineensis.* 3.

Willd. sp. pl. 159 —*Aletris Hyacinthoides β. Linn. sp. pl.* 456.—*Comm. hort.* 2. *t.* 30.

HABITAT in Guinea. S. ♃.

FLORET Jun.—Nov.

INTROD. 1690.

læte-virens. 4. * S. (Light-green) foliis subtribus patulis flaccidis lanceolato-ensiformibus pallidè viridibus, fasciis sæpius omnino obliteratis.

HABITAT .... S. ♃.

FLORET ....

INTROD. ....

spicata. 5. S. (Spiked) angustior, foliis subundecim suberectis prærigidis fragilibus lanceolato-ensiformibus, fasciis valde obsoletis.—*Salmia spicata, foliis rigidis canaliculatis maculatis, floribus spicatis. Cav. ic.* 3. *t.* 246.

HABITAT .... S. ♃.

FLORET ....

INTROD. ante 1790.

** ANGUSTIFOLIÆ. *Foliis angustè lanceolato-ensiformibus, lineatis infernè; subulaque tereti manifestè finientibus.*

Zeylanica. 6. S. (Various-leav'd) foliis sub-8 fasciatis; infimis suboblongis planis, sequentibus lineari-ensiformibus altè canaliculatis.—*Sanseviera Zeylanica. Willd. sp. pl.* 2. 159.—*et Persoon. synopsis,* 1. 372.—*at exclusis synonymis Cav. et Loureir.*—*Aletris Hyacinthoides. Linn. sp. pl.* 456.

HABITAT in Zeylona. S. ♃.

FLORET Jun.—Nov.

INTROD. 1690.

ensifolia. 7. * S. (Sword-leav'd) foliis sub-15 erectis ensiformibus, obtusè carinatis lineatis.—Sanseviera lanuginosa. *Willd. sp. pl.* 2. 160?

HABITAT in Ind. Or. St. ♃.
FLORET....
CULT. . ..
OBS. *Folia* basi vix attenuata, altitudine sequentis, et similiter lineata.

S. (Large-pointed) foliis subduodecim, suberectis, lanceolato-ensiformibus præfasciatis, subulâ magnâ terminatis; subtus lineis 4—6 longitudinalibus validis sæpe interruptis. *grandicuspis.* 8. *
HABITAT.... S. ♃.
FLORET....
INTROD. ....

S. (Dwarf) foliis subviginti, patulis, lanceolato-ensiformibus præfasciatis; subtus lineis 4—6 longitudinalibus validissimis sæpe interruptis. *pumila.* 9. *
HABITAT C. B. S? S. ♃.
FLORET....
INTROD. ante 1796.
OBS. *Folia* breviora quam in priore.

DRACÆNA. *Gen. pl.* 574.

Cor. 6-partita, erecta. *Filam.* medio subcrassiora. *Bacca* 3-locularis, 1-sperma.

D. (Dragon Tree) arborea, foliis subcarnosis apice spinosis. *Willd. sp. pl.* 2. 155.—*Hort. kew. ed.* 2. *v.* 2. *p.* 277. *Draco.* 1.
HABITAT in Ind. Or. S. ♄.
FLORET....
CULT. 1640.
OBS. *Folia* lineari-ensiformia.

D. (Sword-leav'd Dragon Tree) arborea foliis subcarnosis lanceolato-ensiformibus. *ensifolia.* 2. *
HABITAT.... S. ♄.
FLORET....

INTROD. ante 1800.

OBS. 1. *Folia* duplo latiora quam in priore.

OBS. 2. *Dracæna* ensifoliosa aliorum, Dianellæ species est.

BONAPARTEA.

Calyx inferus, diphyllus: foliolis convolutis. *Petala* tria, in se invicem convoluta. *Filamenta* receptaculo inserta. *Antheræ* versatiles, exertæ.* *Germen* pyramidale. Stylus triqueter. *Stigmata* tria, leviter fimbriata. *Capsula* trilocularis, trivalvis; valvulis medio septiferis. *Semina* numerosa, setâ terminata. *Receptacula* tria, linearia, per sinus columellæ centralis, trialatæ, decurrentia. *Fl. peruv. tom.* 3. 38. *t.* 242.

Juncea. 1. B. (Rush-leav'd) foliis imbricatim capitatis multifariis erecto-recurvis, anguste pugioniformibus utrinque convexis rigidis carnosis viridibus.—*Bonapartea Juncea; foliis subulatis canaliculatis culmo longioribus, spicâ compositâ thyrsoideâ. Fl. peruv. l. c.*

HABITAT in Peru. D. S. ♄. S. ♃.

FLORET ....

INTROD. 1800.

OBS. Tillandsiæ valde affinis; at Habitu potius Yuccæ. *Caudex* senectus brevis; *folia* pedalia, juniora collecto-conniventia ut in Yuccâ; seniora erecto-patula; antiqua recurva: omnia basi valde dilatata, arctè imbricata, subciliato-filamentosa, apice aculeiformia pungentia. *Flores* non vidi.

Est Bonapartea Juncea, haud -androrum; nec Fl. Peruv. l. c.
Est etiam Littaea geminiflora, Tagliabu. — — b.

YUCCA. (Adam's Needle.) *Gen. pl.* 580.

Cor. campanulato-patens. *Stylus* nullus. *Caps.* 3-locularis.

Y. (Aloe-leav'd) foliis crenulatis strictis. *Willd. sp. pl.* 2. 183.—*Hort. kew. ed.* 2. *v* 2. *p.* 291.—*Yucca gloriosa. Bot. rep.* 473. *monente Bot. mag.* *Aloifolia.* 1.

HABITAT in Jamaica—Vera Cruce. G. H. ♄.
FLORET Aug. Sept.
CULT. 1696.

Y. (Drooping-leav'd) foliis crenatis nutantibus. *Willd. sp. pl.* 2. 184.—*Hort. kew. ed.* 2. *v.* 2. *p.* 291. *Draconis.* 2.

HABITAT in Carolina Australiore. G. H. ♄.
FLORET Oct. Nov.
CULT. 1732.

Y. (Oblique-leav'd) foliis lanceolato-linearibus oblique undato-flexis integerrimis. *obliqua.* 3. *

HABITAT .... S. ♄.
FLORET ....
CULT. ante 1808.

Y. (Broad, entire-leav'd) foliis lineari-lanceolatis integerrimis erectis. *Yucca gloriosa*, foliis integerrimis. *Willd. sp. pl.* 2. 183.—*Hort. kew. ed.* 2. *v.* 2. *p.* 291.—*Bot. magaz.* 1260. *gloriosa.* 4.

HABITAT in Carolina Australiore. H. ♄.
FLORET Aug. Sept.
INTROD. 1732.

Y. (Recurve-leav'd) foliis viridibus, recurvo-deflexis; margine rare filamentosis: petalis interioribus parum latioribus. *Salisb. parad. lond.* 31. *recurva.* 5.

HABITAT in Georgia. H. ♄.

Floret Aug.
Introd. ante 1795.

serrulata. 6. * Y. (Broad rough-edg'd) foliis lineari-lanceolatis erectis serrulatis.
Habitat in Carolina. G. H. ♄.
Floret ....
Introd. ante 1808.
Obs. Y. gloriosæ simillima, at satis differt foliorum marginibus minute crenulatis.

filamentosa. 7. Y. (Thready-edg'd) foliis serrato-filiferis. *Willd. sp. pl.* 2. 184.—*Hort. kew. ed.* 2. *v.* 2. *p.* 291. —*Bot. magaz.* 900.
Habitat in Virginia. H. ♄.
Floret Sept. Oct.
Cult. 1675.

AGAVE. *Gen. pl.* 582.

Cor. supera, 6-partita, erecta. *Filam.* corolla longiora, erecta. *Antheræ* versatiles.

* *Foliis glaucis.*

americana. 1. A. (Common) scapo ramoso, stylo filamentis longiore, foliis glaucis margine concoloribus. —*Agave americana. Willd. sp. pl.* 2. 192. *Hort. kew. ed.* 2. *v.* 2. *p.* 301.
Habitat in America calidiore. G. H. ♃.
Floret Aug.—Oct.
Cult. 1640.
β. foliis margine latè eleganterque luteis.
Obs. This is the plant which is called "Aloe" by people uninformed in botany, and supposed by them to flower but once in a hundred years, and was formerly said to have made a report louder than a gun when it blossomed. It is nevertheless capable of flowering even in England,

in three or four score years, if properly treated; and in its native climate at about a dozen years old: and in some very hot countries it is said to blossom in three or four years. After flowering, the old plant dies; leaving numerous offsets to succeed it. The tale of its making a louder report than a pistol arose from the rarity of its flowering being more *talked of*, and consequently in that manner making a greater noise than a gun. It was introduced into Europe by Cortusus in 1561, and is now used for hedges in Spain and Portugal; and in South America, its native country, quantities of fine wine are made from fermenting a juice which is obtained from cutting down the flower stem on its first appearance; each stem yielding many gallons of fluid, which is also occasionally drunk pure and wholesome as it issues, without having undergone the vinous fermentation. To describe the flowers or lofty stem, often twenty-five feet high, or even its unexampled quickness of growth (rapid, as that of the plant is slow, compensating for past delay), is superfluous, as almost every one has now seen an advertised "Aloe" in bloom.

A. (Miller's) foliis dentato-spinosis, scapo simplicissimo. *Mill. dict. ed.* 8.—*Agave virginia: nec A. virginica aliorum.* *Milleri.* 2.

Habitat .... G. H. ♃.

Floret ....

Cult. ante 1768.

Obs. This is able to live in the Greenhouse, while the next cannot be preserved but in a good stove. They are much alike, yet appear distinct.

flaccida. 3. * A. (Flaccid) foliis angusto-lanceolatis flaccido-recurvis, spinis marginalibus minutis.
HABITAT in America calidiore? S. ♄.
FLORET ....
CULT. ante 1790.
OBS. In horto Kewense, et Chelseiano, solum vidi.

Vera-crucis. 4. A. (Broad Vera-cruz) foliis oblongis marginibus spinosissimis nigricantibus. *Mill. dict. ed.* 8. *Agave* 7.—*Agave lurida. Hort. kew. ed.* 2. *v.* 2. *p.* 302.—*Willd. sp. pl.* 2. 194.
HABITAT in Vera Cruce. S. ♄.
FLORET ....
CULT. 1731.

angustifolia. 5. A. (Narrow-leav'd) caulescens, foliis anguste lanceolatis glaucis dentato-serratis.
HABITAT .... G. H. ♄.
FLORET ....
CULT. ante 1790.
OBS. Folia angustissima omnium.

** *Foliis viridibus, vel virescentibus.*

Karatto. 6. A. (Karatto) foliis erectis læte virentibus, marginibus fuscis minimè serratis. *Mill. dict. ed.* 8. *Agave* 6. Nec Agave americana.
β. *Hort. kew. ed.* 2. *v.* 2. *p.* 300.
HABITAT in America calidiore. S. ♃.
FLORET ....
CULT. ante 1768.

vivipara. 7. A. (Viviparous) acaulis, foliis dentatis, scapo ramoso, tubo corollæ medio angustato, staminibus corollam æquantibus. *Willd. sp. pl.* 2. 193.—*Hort. kew. ed.* 2. *v.* 2. *p.* 193.
HABITAT in America calidiore. S. ♃.

FLORET Aug.—Oct.
CULT. 1731.

A. (Virginia) scapo simplicissimo foliis minutissime serrulatis.—*Agave virginica. Willd. sp. pl.* 2. 193.—*Ait. hort. kew. ed.* 2. *v.* 2. *p.* 302. *virginica.* 8.
HABITAT in America Septent. F. ♃.
FLORET Sept.
INTROD. 1765.
OBS. There are still other species, or at least varieties, of this stately genus, now alive in Britain, which I have not had sufficient opportunities to determine.

FURCRÆA.

Ventenat in Usteri annal. der botan. 19. *p.* 54.

Cor. supera, 6-petala, patula. *Filam.* corolla breviora, infernè obovata: supernè subulata. *Stylus* 3-queter, basi incrassatus. *Hort. kew. ed.* 2. *v.* 2. *p.* 302.

F. (Gigantic) caulescens foliis integerrimis.—*Furcræa gigantea, l. c.—Agave fœtida. Willd. sp. pl.* 2. 194.—*Mill. dict. ed.* 8. *Agave* 3. *fœtida.* 1.
HABITAT in America calidiore. S. ♄.
FLORET Sept.—Jan.
CULT. 1690.

F. (Tuberous) caulescens foliis dentato-spinosis. *Hort. kew. ed.* 2. *v.* 2. *p.* 303.—*Mill. dict. ed.* 8. *Agave* 4. *tuberosa.* 2.
HABITAT in America calidiore. St. ♄.
FLORET Aug. Sept.
CULT. 1739.

F. (Cuba) corollis hexapetalis, foliis ciliato-spinosis. *Willd. sp. pl.* 2. 193.—*Furcræa tuberosa.* β. *Hort. kew. ed.* 2. *v.* 2. *p.* 303. *cubensis.* 3.

HABITAT in America calidiore. S. ♄.
FLORET ....
CULT. 1739.

rigida. 4. F. (Vera-cruz) foliis lineari-lanceolatis supernè integerrimis, basi ipso serrato-spinosis.—*Agave rigida, foliis lineari-lanceolatis integerrimis, rigidis aculeo terminatis. Mill. dict. ed.* 8. *Agave* 8. *nec Agave lurida* 3. *Hort. kew. ed.* 2. *v.* 2. *p.* 302: *fol in horto Kewense pulchrè crescit.*
HABITAT in America calidiore. S. ♄.
FLORET ....
CULT. ante 1768.

australis. 5. * F. (New Holland) foliis integerrimis longo-lanceolatis patentibus viridibus.
HABITAT in Nova Hollandiâ? S. ♃.
FLORET ....
INTROD. circa 1811.
OBS. This is a new species, allied very closely to F. gigantea, and is said to come from New Holland. I have seen but one plant; it is in Mr. Evans's collection, and has not yet acquired any stem.

ALOE.

Calyx petaloideus, rectus, basi staminifer. *Capsula* parum costata.—*Frutices caulescentes, floribus pendulis. Duvall. plant. succulent. p.* 5.

* *Caule seniculo dichotomo fruticoso, vel suffruticoso.*

plicatilis. 1. A. (Fan) foliis exacte distichis linguæformibus obtusis subintegris, paginis lævissimis mollissimis, caule fruticoso valde dichotomo basi strumoso.—*Aloe plicatilis, subacaulis, foliis*

linguæformibus lævibus distichis. Willd. sp. pl. 2. 190.—*Hort. kew. ed.* 2. *v.* 2. *p.* 296. —*Bot. magaz.* 457.—*Plant. grass. cum icone.*—*Nobis in linn. soc. tr.* 8. 15.

Habitat in Africa. G. H. ♄.

Floret Jun. Jul.

Cult. 1723.

A. (Quiver Tree) caule dichotomo lævissimo fruticoso, foliis ensiformibus serrulatis glaucis: apicibus erectis.—*Aloe dichotoma. Willd. sp. pl.* 2. 181.—*Paterson's journey*, 56. *cum quatuor tabulis.*—*Nobis in linn. soc. tr.* 8. 21. *dichotoma.* 2.

Habitat C. B. S. S. ♄.

Floret . . . .

Introd. 1780.

A. (Purple) caule senecto suffruticoso percrasso dichotomo; foliis ensiformibus glaucis: apicibus recurvis, serraturis marginalibus albis. *Nobis in linn. soc. tr.* 8. 20.—*Aloe purpurascens. Hort. kew. ed* 2. *v.* 2. *p.* 292.—*Aloe perfoliata, purpurascens. Hort. kew. ed.* 1. *p.* 466.—*Aloe sinuata. Willd. sp. pl.* 2. 187. *(exclusis synonymis.)* *purpurascens.* 3.

Habitat C. B. S. G. H. ♄.

Floret Jul.

Cult. ante 1780.

A. (Soccotrine) caule senecto suffruticoso percrasso dichotomo; foliis ensiformibus virescentibus, supernè subincurvatis; serraturis marginalibus parvis albis numerosis. *Nobis in linn. soc. transact.* 8. 19.—*Aloe soccotrina. Hort. kew. ed.* 2. *v.* 2. *p.* 292.—*Aloe perfoliata soccotrina: ed.* 1. 1. 146.; *et Bot. mag.* 472—*Aloe perfoliata, vera. Willd. sp. pl.* 2. 186.—*Aloe vera. Mill dict. ed.* 8. *no.* 15. *soccotrina.* 4.

HABITAT C. B. S. G. H. ♄.
FLORET Ap.
CULT. 1731.

** *Caule fruticoso, nec dichotomo.*

spicata. 5. A. (Spike flower'd) caulescens, foliis planis ensiformibus dentatis, floribus spicatis campanulatis horizontalibus. *Willd. sp. pl.* 2. 185.
HABITAT C. B. S. S. ♄.
FLORET ....
INTROD. circa 1795.
OBS. *Caulis* humanus. *Folia* maculis sive punctis nonnullis albis sparsis.

africana. 6. A. (African) caule fruticoso simplici; foliis ensiformibus glaucis: inferioribus distantibus; apicibus reflexis; dentibus marginalibus igneis. *Nobis in linn. soc. transact.* 5. *p.* 21.—*Hort. kew. ed.* 2. *v.* 2. *p.* 196.
HABITAT C. B. S. G. H. ♄.
FLORET Jul.
CULT. 1731.
β. foliis tuberculis subspinosis numerosis sparsis utrinque.

arborescens. 7. A. (Tree) caule fruticoso, foliis aggregatis ensiformibus glaucescentibus, apicibus reflexis; dentibus marginalibus virescentibus. *Nobis in linn. soc. tr.* 8. 20.—*Aloe arborescens. Hort. kew. ed.* 2. *v.* 2. *p.* 192.—*Bot. mag.* 1306.—*Plant. grass. cum icone.*—*Aloe perfoliata* ξ *Willd. sp. pl* 2. 185.
HABITAT C. B. S. G. H. ♄.
FLORET Nov.—Mar.
CULT. 1731.

ferox. 8. A. (Great Hedgehog) caule fruticoso simplici, foliis ovato-ensiformibus rigidiusculis glaucis

deflexis: paginis, præcipue inferiore regulariter spinosissimis. *Nobis in linn. soc. tr.* 8. 21. —*Hort. kew. ed.* 2. *v.* 2. *p.* 293.—*Aloe perfoliata ferox. Hort. kew. ed.* 1. 1. 467.— *Aloe perfoliata* γ. *Willd. sp. pl.* 2. 185.

HABITAT C. B. S. G. H. ♄.

FLORET ....

CULT. 1759.

β. foliis mitioribus supernè fere inermibus. A sequente differt foliis reflexis, nec incurvo-adscendentibus.

A. (Upright Hedgehog) caule fruticoso simplici; foliis oblongo-ensiformibus rigidis glaucescentibus incurvis, supra lævibus, infra irregulariter spinosis. *Nobis in linn. soc. tr.* 8. *p.* 22.—*Hort. kew. ed.* 2. *v.* 2. *p.* 293.— *Aloe perfoliata* ε. *Willd. sp. pl.* 2. 186.— *Aloe africana caulescens, foliis glaucis caulem amplectentibus: dorso spinoso. Comm. pr. t.* 20. *supralævis.* 9. *

HABITAT ad Caput Bonæ Spei. G. H. ♄.

FLORET ....

CULT. 1731.

A. (Yellow-spin'd) caule fruticoso, propaginibus radicalibus; foliis oblongo-acuminatis glaucis, patulis; senioribus horizontalibus; lateribus dorsoque spinis interruptis latissimis fulvicantibus. *Nobis in linn. soc. tr.* 8. 22. *flavispina.* 10. *

HABITAT C. B. S? G. H. ♃.

FLORET Aug.

CULT. ante 1790.

A. (Mitre) caule fruticoso, propaginibus radicalibus; foliis imbricatis erectis ovato-acutis, spinis marginalibus rarioribus. *Nobis in linn. soc. tr.* 8. 23.—*Aloe mitræformis. Hort. kew. ed.* 2. *v.* 2. *p.* 293.—*Plant. grass. cum icone.* *mitræformis.* 11.

Bot. magaz. 1270.—*Aloe perfoliata, mitreformis. Hort. kew. ed.* 1. *p.* 467.—*Aloe perfoliata* κ. *Willd. sp. pl.* 1. 467.

HABITAT C. B. S. G. H. ♃.

FLORET Aug.

CULT. ante 1732.

nobilis. 12. * A. (Great Mitre) caule fruticoso folioso simplici, absque propaginibus: foliis imbricatis erectis late ovato acutis, infimis subdistantibus; spinis marginalibus numerosis.—*Aloe mitreformis spinosior. Nobis in linn. soc. tr.* 8. 23.

HABITAT C. B. S. G. H. ♄.

FLORET . . . .

CULT. ante 1800.

OBS. Præcedenti simillima, foliis numerosioribus sesquimajoribus, infimis distantioribus: spinis marginalibus frequentioribus.

distans. 13. A. (Small Mitre) caule fruticoso, propaginibus radicalibus, foliis distantibus erecto-patulis ovato-acutis.—*Aloe brevifolia. Nobis in linn. soc. tr.* 8. 23.—*Aloe perfoliata* π *brevifolia. Hort. kew. ed.* 1. 467.—*et edit.* 2. *v.* 2. *p.* 294. *excluso synon.*—*Plant. grass. cum icone, qui penultimam representat.*

HABITAT ad Caput Bonæ Spei. G. H. ♄.

FLORET Aug.

CULT. ante 1732.

albispina. 14. * A. (White-spin'd) caule fruticoso, foliis ovato-acuminatis virescentibus: marginibus carinaque valde spinosis; spinis longis albissimis; senioribus apice flavicantibus; mortuis atris. *Nobis in linn. soc. tr.* 8. 22.

HABITAT C. B. S. S. ♃.

FLORET . . . .

CULT. ante 1796.

*** *Caule senecto suffruticoso, nec dichotomo; propaginibus plerumque radicalibus.*

A. (Barbadoes) caule suffruticoso, propaginibus radicalibus, foliis ensiformibus sinuato-serratis, corollis luteis. *Nobis in linn. soc. tr.* 8. *p.* 19.—*Aloe barbadensis. Mill. dict. ed.* 8. *no.* 2.—*Aloe perfoliata, barbadensis. Hort. kew. ed.* 1. *p* 466.—*Aloe vulgaris. Plant. grass. cum icone.*—*Hort. kew. ed.* 2. *v.* 2. *p.* 292. *barbadensis.* 15.

Obs. Propaginum *folia* sæpe valde maculata, at senecta caulis principis, immaculata, vel maculis paucis basin versus infernè.

Habitat in Ind. Occ. S. ♄.

Floret Aug.

Cult. 1596.

A. (Red-spin'd glaucous) foliis oblongo-ensiformibus, valde glaucis; spinis marginalibus rubris.—*Aloe glauca. Nobis in linn. soc. tr.* 8. *p.* 18.—*Hort. kew. ed.* 2. *v.* 2. *p.* 295.—*Mill. dict. ed.* 8. *no.* 16, *exclusis observationibus.* *glauca.* 16.

α. *Major* foliis dealbatis: spinis junioribus pallidioribus adscendentibus. *Nobis l. c.*

β. *Minor*, foliis minoribus magis patulis cærulescenti-glaucis mollioribus, subtus apicem versus subtuberculatis: spinis junioribus virescentibus respicientibus. *Nobis l. c.*—*Aloe rhodocantha. Bot. magaz.* 1278, *sed vix Plant. grass. quæ tertia varietas.*

Habitat C. B. S. G. H. ♄.

Floret. Jan.—Dec.

Cult. 1731.

A. (Red-spin'd striped) foliis viridibus lineatis spinis rubris.—*Nobis in linn. soc. tr.* 8. *p.* 18. —*Hort. kew. ed.* 2. *v.* 2. *p.* 295.—*Aloe perfoliata* η *lineata. ed. prior.* *lineata.* 17.

HABITAT C. B. S. S. ♄.
FLORET ....
CULT. ante 1789.
OBS. The lines depicted upon the *under* sides of the leaves of this and some other Aloes, appear more or less on dissection, in every species, and even in Gasteria, and Haworthia: but often more faint. These lines are merely the parallel nerves of the cutis of the leaves, which, when the epidermis is more than usually transparent, become visible through it. The same remarks will apply to the tesselating lines in the genus Opuntia. A perpendicular section shows the lines; but in a transverse one, they appear like minute and regularly distributed dottings.

depressa. 18. A. (Depressed) foliis oblongo-ovatis acutis glaucis; subtus tuberculatis, marginibus carinaque apice cartilagineis albo crenatis. *Nobis in linn. soc. tr. 10.—Bot. magaz. 1332, excluso synonymo Milleri.—Hort. kew. ed. 2. v. 2. p. 291.—Aloe perfoliata ν depressa, edit. prior.* ~~[illegible]~~ *Observationes tantum ad Alo. speciem 16. Mill. dict. ed. 8. absque charactere specifico, qui ad A. glaucam pertinet.*
HABITAT C. B. S. G. H. ♄.
FLORET Aug.
CULT. 1731.

brevifolia. 19. A. (Short-leav'd) subacaulis foliis lanceolatis acutis glaucis: marginibus carinaque apice spinosis vix cartilagineis; subtus subtuberculatis. Aloe (brevioribus) foliis amplexicaulibus utrinque spinosis, floribus spicatis. *Mill. dict. ed. 8. excluso synonymo Commelini, quod ad*

antecedentem rectius pertinet.—Aloe brevifolia. Plant. grass. cum icone.—Hort. kew. ed. 2. v. 2. p. 294—Aloe perfoliata δ. Willd. sp. pl. 2. 185.—Aloe prolifera. Nobis in linn. tr. 7. 16.

HABITAT C. B. S. G. H. ♄. S. ♃.

FLORET Jul.

CULT. 1731.

OBS. In the Stove this acquires a short stem by age, but not in the Green-house.

*** *Caule senecto suffruticoso nec dichotomo, propaginibus radicalibus, foliis trifariis.*

A. (Partridge-breast) foliis trifariis pictis fasciis albis, canaliculatis, angulis cartilagineis obsolete serrulatis. *Aloe variegata. Willd. sp. pl. 2. 190.—Hort. kew. ed. 2. v. 2. p. 296.—Bot. magaz. 513.—Plant. grass. cum icone.—Aloe variegata, foliis trifariis pictis. Nobis in linn. soc. tr. 7. 14.* *variegata.* 20.

HABITAT C. B. S. G. H. ♄.

FLORET Jun. Jul.

CULT. 1720.

α. Stylo staminibusque corolla brevioribus, fasciis viridibus foliorum angustioribus. *Nobis l. c.*

β. Stylo staminibusque corolla longioribus, fasciis viridibus latioribus. *Nobis l. c.*

**** MACULATÆ. *Caule senecto suffruticoso nec dichotomo, propaginibus radicalibus, foliis multifariis lævibus plus minus maculatis.*

A. (Striated) foliis glaucis longitudinaliter substriatis, obsoletissimè maculatis, marginibus albo-cartilagineis integriusculis.—*Aloe stria-* *striata.* 21. *

ta. Nobis in linn. soc. tr. 7. p. 18.—Hort. kew. ed. 2. v. 2. p. 295.

HABITAT C. B. S. G. H. ♃.

FLORET ....

INTROD. ante 1795.

serrulata. 22. A. (Serrulated) foliis maculatis: marginibus, carinaque apice serrulatis. *Nobis in linn. soc. tr. 7. p. 18.—Hort. kew. ed. 2. v. 2. p. 295.—Bot. magaz. cum icone.—Aloe perfoliata λ serrulata. Hort. kew. ed. prior.*

HABITAT C. B. S. S. ♄.

FLORET Jul.

CULT. ante 1789.

OBS. *Bot. magaz.* conjectures this may be the variety of *variegata*, said to have been raised from seeds by Miller. But it is far nearer related to *obscura*, and extremely distinct from both. Indeed *variegata* still stands *alone* in the genus; having no ally.

obscura. 23. A. (Great-Soap) foliis elliptico-lanceolatis læte viridibus glaucescentibus, maculis brevibus s. subrotundis parvis albicantibus sparsis; spinis ruberrimis: *floribus thyrso-spicatis.—Aloe obscura. Mill. dict. ed. 8. no. 6.—Aloe Saponaria obscura. Nobis in linn. tr. 7. p. 17. excluso synon. Brad.—Aloe picta α major. Willd. sp. pl. 2. 186.—Hort. kew. ed. 2. v. 2. p. 293.—Bot. magaz. 1323.—Aloe perfoliata κ obscura. Hort. kew. ed. 1. p. 467.*

HABITAT ad Caput Bonæ Spei. G. H. ♃.

FLORET Jun. et Sept.

CULT. 1727.

latifolia. 24. * A. (Broad-leav'd Soap) foliis ovato-lanceolatis pallide viridibus maculis oblongis obsoletis albicantibus sparsis subfasciatisque; spinis ru-

fescentibus; floribus thyrso-capitatis.—*Aloe saponaria latifolia. Nobis in linn. soc. tr. 7. p. 18.—Bot. magaz.* 1346.

HABITAT C. B. S. G. H. ♄.

FLORET Jul. Aug.

INTROD. 1795.

OBS. *Bot. magaz.* calls this "an old inhabitant of our green-houses," but erroneously, it having been introduced in 1795 and not before, and is yet very rare.—It has the most showy and largest head of flowers in the genus.

A. (Common Soap) foliis oblongo-lanceolatis sordidè viridibus subglaucescentibus maculis majusculis oblongis albidis fasciatim transversis; spinis rufescentibus; floribus thyrso-capitatis.—*Aloe perfoliata saponaria. Hort. kew. ed. 1. p. 467.—Aloe saponaria minor. Nobis in linn. soc. tr. 7. p. 17.—Aloe disticha. Mill. dict. ed. 8. no. 5.—Aloe picta β. Willd. sp. pl. 2. 187.* ***saponaria.*** 25.

HABITAT ad Caput Bonæ Spei. G. H. ♄.

FLORET Jul.

CULT. 1727.

OBS. Having raised a great quantity of this from seeds, every one of which exactly resembled the parent, I have no hesitation in giving it as a distinct species from the preceding.

***** ACAULES; *foliis multifariis ciliato-spinosis, propaginibusque cæspitosis.*

A. (Apple-green) subacaulis foliis oblongo-lanceolatis viridibus, parcè maculatis, marginibus remotè spinosis; spinis viridibus, floribus thyrso-spicatis. *Nobis in linn. soc. tr. 7. p. 17.—Bot. magaz.* 1355. ***virens.*** 26. *

HABITAT C. B. S? G. H. ♃.

Floret Aug. Sept.

Cult. ante 1790.

Obs. If forced in the stove it acquires a short stem in a few years, but not in the greenhouse.

suberecta. 27. A. (Lesser Hedgehog) foliis septuncialibus acuminatis glaucis supra planis lævibus; subtus apicem versus tuberculatis: laciniis corollæ acuminatis incurvis, apice subcrenulatis.—*Aloe suberecta. Hort. kew. ed. 2. v. 2. p.* 295. —*Aloe suberecta β. Nobis in linn. soc. tr.* 7. 16.—*Aloe perfoliata, β suberecta. Hort. kew. ed.* 1. *v.* 1. *p.* 467.

Habitat C. B. S. G. H. ♃.

Floret Mar.—Jun.

Introd. ante 1789.

Obs. Propaginibus radicalibus infrequentissimis, et solum in senectissimis.

acuminata. 28. * A. (The middle Hedgehog) foliis subquadriuncialibus acuminatis glaucescentibus, supra planis lævibus, parce spinosis; subtus valde tuberculatis; laciniis corollæ obtusis.—*Aloe suberecta α. Nobis in linn. tr.* 7. *p.* 16.—*Aloe humilis. Bot. magaz.* 757. (*nec aliorum*) *exclusis synonymis forte omnibus.*

Habitat C. B. S. G. H. ♃.

Floret Mar.—Mai.

Introd. circa 1795.

Obs. Priore duplo triplove minor, propaginibus radicalibus frequentibus: laciniis corollæ magis expansis.

tuberculata. 29. * A. (Tubercled Hedgehog) foliis acuminatis; supra concaviusculis; undique numerosissime tuberculatis. *Nobis in linn. soc. tr.* 7. 16.

Habitat C. B. S. G. H. ♃.

FLORET Mar.—Mai.
CULT. circa 1796.

A. (Dwarf Hedgehog) foliis subulatis supra turgidis, inermi spinosis; infra tuberculatis; apicibus rectiusculis; bracteis internodio longioribus; stylo staminibus breviore. *Nobis in linn. tr.* 7. *p.* 15.—*Plant. grass. cum icone.*—*Hort. kew. ed.* 2. *v.* 2 *p.* 294. *exclus. synon. Bot. magaz.*—*Aloe perfoliata ξ humilis, edit. prior.* 1. 467. *humilis.* 30.

β. foliis aliquot latioribus.
HABITAT C. B. S. G. H. ♃.
FLORET Mar.—Jun.
CULT. 1731.

A. (Incurv'd Hedgehog) foliis subulatis teretiusculis undique valde tuberculatis: apicibus incurvatis, bracteis internodio brevioribus, stylo staminibus longiore.—*Aloe humilis, incurva. Nobis in linn. soc. tr.* 7. 15.—*Bot. magaz.* 828. *incurva.* 31. *

HABITAT C. B. S. G. H. ♃.
FLORET Mar.—Jun.
CULT. circa 1796.

GASTERIA.

Calyx petaloideus, curvus, obclavatus, basi stamineifer. *Capsula* parum costata. *Fruticuli vix caulescentes, foliis Aloëum; floribus pendulis. Duval. plant. succulent. in horto alenconio, p.* 6.

OBS. *Folia linguæformia.*

* *Propaginibus radicalibus nullis. Corollis brevioribus, ventricosioribus; foliis undique lævigatis, sæpius variegatis.*

G. (Broad, Marbled) caule senecto sesquipedali subdichotomo; foliis spiraliter multifariis pictis *obliqua.* 1.

angustè-linguæformibus obtusissimis cum mucrone.—*Aloe obliqua. Nobis in linn. tr.* 7. 14.—*Plant. grass. cum icone.*—*Aloe maculata obliqua. Hort. kew. ed.* 1. *et* 2.—*Aloe lingua, α. Bot. magaz.* 979.

HABITAT C. B. S. S. ♄.

FLORET Jul. Aug.

CULT. ante 1759.

pulchra. 2. G. (Narrow, Marbled) caule senecto sesquipedali subdichotomo; foliis spiraliter multifariis pictis ensiformibus acutis.—*Aloe pulchra. Nobis in linn. soc. tr.* 7. 16.—*Aloe maculata pulchra. Hort. kew. ed.* 1. *et* 2.—*Willd. sp. pl.* 2. *p.* 189.—*Aloe maculata. Bot. magaz.* 765.

HABITAT C. B. S. S. ♄.

FLORET Jul. Aug.

CULT. ante 1759.

nigricans. 3. G. (Dark Tongue) caule senecto subpedali simplicissimo tecto, foliis exactè distichis imbricatis latè linguæformibus brevibus obtusis obsoletè maculatis, marginibus cartilagineis integris.—*Aloe nigricans. Nobis in linn. tr.* 7. 13.—*Aloe lingua crassifolia. Hort. kew. ed.* 1. *et* 2.—*Willd. sp. pl.* 2. 190.—*Aloe lingua β. Bot. magaz.* 838.

HABITAT C. B. S. G. H. ♃.

FLORET Jun. Jul.

CULT. apud Fonthill circa 1790.

OBS. It is mistakenly said in *Bot. magaz.* to be "common, and to be propagated by offsets, and of easy culture," for it is unfrequent; owing to its never producing a single offset. The only mode of increase is by planting the long lived leaves, which few consent to rob their plants of. The detached leaf in *Bot.*

magaz. on tab. 1332. taken from my old plant, appears serrulated; but the leaves themselves are entire.

** ACAULES, *propaginibus radicalibus cespitosis; corollis longioribus minus ventricosis; foliis linguæformibus, plus minus maculatis vel tuberculatis (prima excepta).*

G. (Smooth, Keel'd) glabra: foliis multifariis linguæformi-acuminatis maculatis, supernè excavatis, subtùs altè carinatis; margine carinaque cartilagineis: propaginibus nullis.—*Aloe carinata β subglabra. Nobis in linn. soc. tr.* 7. 14. *glabra.* 4. *

HABITAT C. B. S. G. H. ♃.
FLORET Jun. Jul.
CULT. circa 1796.

G. (Rough, Keel'd) foliis multifariis linguæformi-acuminatis albo-tuberculatis, supernè excavatis, subtùs altè carinatis; carina marginibusque tuberculato-scabris: propaginibus numerosissimis cespitosis.—*Aloe carinata. Hort. kew. ed.* 1. *p.* 469.—*ed.* 2. *v.* 2. *p.* 197. —*Willd. sp. pl.* 2. 189. *(excluso synonymo Martini.)*—*Nobis in linn. soc. tr.* 7. 13.—*Bot. magaz.* 1331. *excepto folio sinistro, quod ad præcedentem pertinet, at margine magis serrulato.* *carinata.* 5.

HABITAT in Africa. G. H. ♃.
FLORET Jun. Jul.
CULT. 1731.

G. (Acute Tongue) foliis distichis linguæformibus acutis maculatis, marginibus tuberculato-serrulatis.—*Aloe lingua, latifolia. Nobis in linn. soc. tr.* 7. 13. *latifolia.* 6.

HABITAT C. B. S. G. H. ♃.

Floret Mar.—Nov.

Introd. ....

β. (*multifaria*) foliis obliquè multifariis curvis linguæformibus acutis cultratis, marginibus tuberculato-serrulatis.—*Aloe lingua, multifaria. Nobis in linn. soc. tr.* 7. 12.

Obs. Forte propria species, foliis (in senectis) altero margine crassiore, spiraliter multifariis.

angulata. 7. * G. (Retuse Tongue) foliis distichis linguæformibus retusis cum mucrone, obsoletè maculatis uno latere alterove curvis et carinatis; marginibus sæpe inflexis subtuberculato serratis.—*Aloe lingua, angulata. Nobis in linn. soc. tr.* 7. 13.

Habitat C. B. S. G. H. ♃.

Floret Mar.—Nov.

Ex Lusitania accepi anno 1791.

Obs. *Folia* latiora quam in affinibus, minus lævia magisque retusa; marginibus minus asperis.

angustifolia. 8. * G. (Narrow Tongue) foliis obliquè distichis obtusis saturatè viridibus, maculis distinctis sparsis.—*Aloe lingua, angustifolia. Nobis in linn. soc. tr.* 7. 13.—*Aloe linguiformis verrucosa. Plant. grass. exclusis synonymis Mill. et Boerhaav.*

Habitat C. B. S. G. H. ♃.

Floret Mar.—Nov.

Cult. 1731.

Obs. A semine non variat.

longifolia. 9. * G. (Long-leav'd Tongue) foliis distichis linguæformibus longis obtusis pallidè viridibus, marginibus tuberculato scabris.—*Aloe lingua, longifolia. Nobis in linn. soc. tr.* 7. 13.

Habitat C. B. S. G. H. ♃.

Floret Mar.—Nov.

Cult. ante 1796.

Obs. Fol. exactè disticha, maculis distinctioribus paucioribus, quam in ultimis, et subinde fere in fascias dispositis.

G. (Short-leav'd Tongue) foliis exactè distichis parabolico-linguæformibus brevibus obtusis, marginibus supernè lævibus. *brevifolia.* 10. *

Habitat C. B. S. G. H. ♃.

Floret Jul. Aug.

Cult. ante 1809. – Communicavit Dom. Hill.

Obs. Facies G. nigricantis, at pallidè virens; corollis longioribus. Folia duplo breviora quam in præcedente; at simillima, exceptis apicibus glabris.

G. (Intermediate Tongue) foliis bifariis subensiformibus, læte viridibus; tuberculis numerosissimis albicantibus sparsis.—*Aloe intermedia. Nobis in linn. soc. tr.* 7. 12 *intermedia.* 11. *

Habitat C. B. S. G. H. ♃.

Floret Mar.—Nov.

Cult. 1790.

G. (Pearl Tongue) foliis bifariis ensiformibus acutis perviridibus supra concavis: undique tuberculis margaritaceis numerosissimis sparsis.—*Aloe verrucosa. Nobis in linn. soc. tr.* 7. 12 —*Aloe carinata. Plant. grass. cum icone* —*Bot. magaz.* 837. *verrucosa.* 12.

Habitat C. B. S. G. H. ♃.

Floret Mar.—Nov.

Cult. 1731.

β. Foliis oblique submultifariis.—Communicavit Dom. Hooker, Sen.

HAWORTHIA.

Calyx petaloideus, rectus, superne revolutus in duo labia, basi staminifer. Capsula in costas valde prominens. *Fruticuli vix caulescentes, foliis* Aloium, *floribus erectis. Duval. plant. succ. in hort. alenc. p. 7.*

* CAULESCENTES, *corollis bilabiatis; laciniis recurvis; foliis rigidissimis.*

viscosa. 1. H. (Smooth triangular) foliis trifariis ovatis acutis perviridibus minime tuberculatis, caulibus strictis simplicibus.—*Aloe viscosa. Nobis in linn. tr. 7. p. 6.—Plant. grass. cum icone.—Bot. magaz.*

HABITAT C. B. S. G. H. ♄.
FLORET Mai.—Jul.
INTROD. 1732.

aspera. 2. * H. (Rough triangular) foliis trifariis orbiculato-ovatis acuminatis viridibus; supra subconcavis; subtus valde tuberculatis, caule stricto.—*Aloe aspera. Nobis in linn. tr. 7. p. 6.*

HABITAT C. B. S. S. ♄.
FLORET Mai.—Jul.
INTROD. 1795.

tortuosa. 3. * H. (Twisted triangular) foliis spiraliter trifariis patulis nigricantibus; externe minime tuberculatis, caule valde tortuoso.—*Aloe tortuosa. Nobis in Linn. soc. tr. v. 7. p. 7.—Aloe rigida. Bot. mag. 1337. sed a Al. rigida Plant. grass. toto cœlo discrepat.*

HABITAT C. B. S? G. H. ♄.
FLORET Mai.—Sept.
CULT. circa 1791.

OBS. How the Authors of *Bot. magaz.* should make this trifarious plant the same with our

multifarious *expansa*, we cannot guess; or that they should make Decandolles *rigida* also to be the same.

H. (Spreading-leav'd) subacaulis, foliis multi- *expansa.*
fariis [illegible] junioribus patulis, 4.
senioribus horizontalibus [illegible].—*Aloe expansa. Nobis in linn. soc. tr. v. 7. p. 8.*—*Aloe rigida. Plant. grass. cum icone.*

β. *Paulo major.*

HABITAT C. B. S. S. ♄.

FLORET. Jul.—Oct.

INTROD. circa 1795.

OBS. The *Aloe rigida* of *Plant. grass.* appears larger, less branched, and more purpurescent than either of the above varieties.

** ACAULES, *corollis albicantibus: laciniis recurvis; foliis rigidis multifariis, undique tuberculatim vel margine saltem cartilagineo-albo, margaritaceis, scapis superne effuso-paniculatis.*

H. (White) foliis lanceolatis mucronatis albi- *albicans.*
cantibus; marginibus carinaque cartilagineis. 5.
—*Aloe albicans. Nobis in linn. soc. tr. 7. p. 8.*—[illegible] *Com. prælud. t. 30. absque flore.*—*Com. plant. rarior. t. 15. cum flore.*—*Com. hort. amst. pars alt. t. 7.*

HABITAT C. B. S. S. ♃.

FLORET Sept.

INTROD. 1795.

H. (Largest Pearl)—*Haworthia maxima. Du-* *maxima.*
val. plant. succ. in hort. alenc. p. 7.—*Aloe* 6.
margaritifera, maxima. Nobis in linn. soc. *
tr. 7. p. 11.

HABITAT C. B. S. G. H. ♃.
FLORET Aug.
CULT. ante 1801.
OBS. In the present improved state of our knowledge of this plant, there is but little doubt that its three supposed varieties are distinct species; and they are here enumerated as such: but their complete characters, and confused synonyma, are left till another opportunity of examining their flowers occurs. They are now frequent in the Gardens.—Nov. 1811.

major. 7. * H. (Larger Pearl)—*Haworthia major. Duval. plant. succ. in hort. alenc. p. 7.—Aloe margaritifera, major. Nobis in linn. soc. tr. 7. p. 11.*
HABITAT C. B. S. G. H. ♃.
FLORET Mai.—Sept.
CULT. 1739.

minor. 8. * H. (Lesser Pearl)—*Haworthia minor. Duval. plant. succ. in hort. alenc. p. 7.—Aloe margaritifera, minor. Nobis in linn. soc. tr. 7. p. 11.*
HABITAT C. B. S. G. H. ♃.
FLORET Mai.—Aug.
INTROD. ....

minima. 9. * H. (Least Pearl)—*Aloe margaritifera, minima. Nobis in linn. soc. tr. 7. p. 11.*
HABITAT C. B. S. G. H. ♃.
FLORET Mai.—Sept.
INTROD. ....
OBS. A semine non variat.

attenuata. 10. * H. (The chalky Pearl) foliis erecto-recurvis subulato-attenuatis, subtus tuberculis cretaceo-margaritaceis majoribus; supra minutissimis; capsulis oblongis triquetris.—*Aloe attenuata.*

Nobis in linn. soc. tr. 7. p. 11.—Aloe radula. Kerr in bot. magaz. 1345. at omnino diversa a radula Jacquini, quæ citata est.

HABITAT C. B. S. G. H. ♃.

FLORET Mai.—Aug.

CULT. ante 1790.

OBS. *Bot. magaz.* makes this plant the same as *radula* of Jacquin, and even changes its name to *radula*. Nevertheless the plants themselves are very distinct.

H. (Raspy Pearl) foliis erecto-recurvis subulato- *radula.*
attenuatis; undique asperis, tuberculis minu- 11.
tissimis crebris sparsis cretaceo margaritaceis. —*Aloe radula. Jacq. hort. schœn. cum icone.*

HABITAT C. B. S. G. H. ♃.

FLORET Aug.

INTROD. 1805.

*** ACAULES, *corollis bilabiatis: laciniis recurvis, foliis multifariis mollioribus, (ultimis quatuor ciliatis) scapis gracilibus, ramis strictioribus.*

H. (Boat-leav'd) foliis cymbiformibus obtusis *cymbi-*
glaucis; supra valde concavis; apicibus ca- *formis.*
rinatis obsoletè reticulatis: propaginibus nu- 12.
merosis.—*Aloe cymbiformis. Nobis in linn.* *
soc. tr. 7. p. 8.—Bot. magaz. cum icone.

HABITAT C. B. S. G. H. ♃.

FLORET Jun.—Aug.

INTROD. 1795.

OBS. This odd species considerably resembles the stemless Family of the Genus Sempervivum: its leaves being concave above, and pointed, with a keel beneath the points, remind us of the little hollow boats which schoolboys make.

reticulata. 13. * H. (Netted) foliis æquilateri-triquetris obtusiusculis glaucescentibus reticulatis supra subconcavis.—*Aloe reticulata. Nobis in linn. soc. tr. 7. p. 9.—Hort. kew. ed. 2. v. 2. p. 300.—Aloe arachnoides γ reticulata. Bot. magaz.* 1314.

HABITAT C. B. S. G. H. ♃.

FLORET Mai.—Aug.

CULT. ante 1794.

OBS. *Bot. magaz.* conceives that this is a variety of *pumila*, raised from seeds by Miller. But in all probability Miller never saw this plant. I first met with a single root of it about fourteen years ago in one of the Bark Stoves of the Earl of Tankerville at Walton, and never found it in any other place; except latterly, and derived from thence. Neither does *Bot. magaz.* make any *specific* difference between *reticulata*, *pumila*, *translucens*, and *arachnoides*.

recurva. 14. * H. (Recurve-leav'd) foliis subulatis crassis erecto-recurvis; supra concavis, subtus subtuberculatis: marginibus obscure margaritaceo-tuberculatis.—*Aloe recurva. Nobis in linn. soc. tr. 7. p. 10.—Bot. magaz. cum icone.*

HABITAT C. B. S. S. ♃.

FLORET Aug.

INTROD. 1795.

OBS. This is the only species of the Genus whose leaves bend back. They are erect at first, but with recurving points. It offsets but seldom, and is consequently rare; is also a shy plant, and likes water rather freely for a succulent one; and yet often perishes from having too much, unless planted on a little

hill in the centre of its pot: so that the waterings may never reach its base. If by accident it becomes too wet from drips, or otherwise, in the winter season of the year, shake it out of its pot, dry it for a few hours, or half a day or more, as may seem requisite; then replant it in dry earth. These remarks apply equally well to *all the lesser and more delicate* succulents; such as Stapelias, &c. Indeed, it is impossible to keep some of them long without these troublesome attentions. In winter they are best when watered in their saucers only—once or twice a fortnight; but with discretion, and a sparing hand.

H. (The Cushion) foliis quinquefariis apice retuso-deltoideis pallide viridibus; apice perviridibus, supra lineatis.—*Aloe retusa. Willd. sp. pl.* 2. 191. *Nobis in linn. soc. tr.* 7. 9.—*Plant. grass. p.* 45. *cum icone.*—*Bot. magaz.* 455. *retusa.* 15.

HABITAT C. B. S. G. H. ♃.
FLORET Mai.—Jul.
CULT. 1720.

H. (The rough Cushion) foliis ciliato-spinosis quinquefariis retuso-deltoideis cuspidatis, marginibus carinaque ciliato-spinosis; supra glabriusculis; subtus subtuberculatis obsolete-reticulatis.—*Aloe mirabilis. Nobis in linn. soc. tr.* 7. 9. *mirabilis.* 16. *

HABITAT C. B. S. G. H. ♃.
FLORET Mai.—Aug.
INTROD. 1795.

H. (Small Cobweb) foliis perviridibus, spinis marginalibus herbaceis tuberculisque numerosis.—*Aloe pumila. Nobis in linn. tr.* 7. 10. *pumila.* 17.

—*Aloe arachnoides pumila. Willd. sp. pl.* 2. 188.—*Ait. kew. ed.* 1. *et* 2.—*Bot. magaz.* 1361.—*Aloe herbacea. Mill. dict. ed.* 8.—*Aloe atrovirens. Plant. grass. cum icone.*

HABITAT ad C. B. S. G. H. ♃.

FLORET Mai.

INTROD. 1752.

pellu- *translucens.* 18. * H. (Transparent Cobweb) valde sobolifera, foliis suberectis lanceolato-teretiusculis, eleganter ciliatis; apice maculis oblongis pellucidis. —*Aloe pellucens. Nobis in linn. soc. tr.* 7. 10. —*Hort. kew. ed.* 2. *v.* 2. *p.* 300.—*Aloe arachnoides, pellucens. Bot. mag. cum icone.*—*Aloe pumilio. Jacq. hort. schœnb. v.* 4. *tab.* 34. *(monente Bot. mag.)—at non vidi.*

HABITAT C. B. S. S. ♃.

FLORET Aug.

INTROD. 1795.

OBS. This is a most delicate species, and is impatient of wet and cold. The tips of its leaves are transparent.

arachnoides. 19. H. (Cobweb) foliis expansis lanceolatis, supra planiusculis marginibus cartilagineis crassè ciliatis.—*Aloe arachnoides. Mill. dict. ed.* 8. —*Nobis in linn. soc. tr.* 7. 10.—*Plant. grass. cum icone.*—*Aloe arachnoides a. Willd. sp. pl.* 2. 188.—*Hort. kew.* 1. 467.; *ed.* 2. *v.* 2. *p.* 301.—*Bot. magaz. cum icone.*

HABITAT C. B. S. S. ♃.

FLORET Aug.

CULT. 1727.

OBS. Aloe humilis africana, arachnoides. *Com. præl.* 71. *t.* 27. citata est optimaque dicta in *Bot. magaz.* 756: at potius ad præcedentem pertinet.

**** CAULESCENTES *erectæ. Foliis rigidissimis integris, acuminato-cuspidatis. Corollis cylindricis sub-erectis: limbo sub-regulari. An genus proprium?*

H. (Great spiral) foliis præspiralibus quinquefariis patentibus ovato-acuminatis glabris viridibus, apicem versus carina semilaterali; subtus supernè obsoletè sparsim maculatis; marginibus asperiusculis.—*Aloe spiralis. Nobis in linn. tr. 7. 6.* *spiralis.* 20. *

HABITAT C. B. S? G. H. ♄.
FLORET Aug. Sept.
CULT. ante 1790.
OBS. The leaves are so spirally arranged, as to seem multifarious. Nevertheless they are strictly in five unvarying twisted rows.

H. (Small spiral) foliis præspiralibus quinquefariis patentibus lanceolato-acuminatis glabris pallidè viridibus, apicem versus subbicarinulatis: subtus supernè, carinulisque obsoletè maculatis; marginibus asperiusculis. *spirella.* 21. *

HABITAT C. B. S. G. H. ♄.
FLORET Aug.
CULT. ante 1808.
OBS. Præcedenti simillima, at triplo minor; foliis angustioribus, apice bicarinulatis, carinulis ordine macularum notatis.

H. (Pentangular) foliis quinquefariis glabris viridibus; subtus obsoletè maculatis.—*Aloe pentagona. Nobis in linn. soc. tr. 7. p. 7.—Hort. kew. ed. 2. v. 2. p. 298.—Bot. magaz. 1338.—Aloe spiralis β pentagona. Hort. kew. ed. 1. 471.—Willd. sp. pl. 2. 191.* *pentagona.* 22.

HABITAT in Africa. *Hort. k. l. c.* G. H. ♄.
FLORET Jun. Jul.

CULT. 1731.

OBS. For twenty-five years this plant with me has never become spiral, but constantly produced its imbricated leaves in five rows. Nevertheless I have seen one plant, which seems the same, (and larger than spirella) that did produce them somewhat spirally; and have now a small offset from it before me. From imbricata, this and the two preceding species will be considered abundantly distinct; except indeed by such Botanists as *still* prefer to reduce sections into species, instead of grouping species into sections.

imbricata. 23. H. (Rough-flower'd) erecta, teres: corollis rugosis: foliis multifariis erectiusculis lævigatis immaculatis.—*Aloe imbricata. Nobis in linn. soc. tr.* 7. *p.* 7.—*Aloe spiralis α imbricata. Hort. kew. ed.* 1. 471.—*Willd. sp. pl.* 2. 191.—*Aloe spiralis. Hort. kew. ed.* 2. *v.* 2. *p.* 298.—*Bot. magaz.*—*Plant. grass. cum icone.*—*Aloe africana erecta rotunda, folio acuminato. Com. prælud. t.* 32.

HABITAT in Africa. *Hort. k. l. c.* G. H. ♄.

FLORET Jun. Jul.

CULT. 1731.

OBS. At the time my Aloes were published in the Transactions of the Linnæan Society of London, I had not beheld the rare flowers of this species; which would have well deserved the name of rugiflora, being the only rough-flowered one of the whole *Order* (save Aletris aurea, and A. farinosa). Spiralis is a name now hardly tenable for a plant which has nothing spiral about it; and which moreover Linnæus seems to have so named, from having confounded it with at least one more,

which might be spiral. The first edition of Hortus kewensis divided these, by the subspecific names of *imbricata* and *spiralis*: and as it is the practice of Botanists, when *named* varieties are elevated to the rank of species, to adopt their subspecific names for specific ones; I followed this rule in *Linn. soc. tr.* 7. *p.* 7. by so calling them: and the more readily, because I had also another plant (the first and largest of this section) for the name *spiralis*, with leaves most manifestly disposed in five regular extremely spiral rows; and which may have been the very one Linnæus had in view when he formed the name *spiralis*; or if not it, he may have had *spirella*; or perhaps both: for his knowledge of these plants, at that time, (unless he had seen their smooth flowers,) would hardly have prompted him to make even varieties of them. Be this as it may, I called the large spiral species *spiralis*; and have here continued it.

H. (Many small-leav'd) foliis multifariis brevissimis confertissimis orbiculato-ovatis lævigatis horizontalibus læte viridibus.—*Aloe foliolosa*. *Nobis in linn. tr.* 7. 7.—*Hort. kew. ed.* 2. *v.* 2. *p.* 298.—*Bot. magaz.* 1352. *foliolosa.* 24.

Habitat C. B. S. G. H. ♄.

Floret Jun.—Aug.

Introd. 1795.

Obs. This is the smallest and thinnest leaved species in the Genus. The leaves are also the most numerous, most spreading, and most crowded.

Classis X.

DECANDRIA

MONOGYNIA.

ZYGOPHYLLUM. (Bean Caper.)
Gen. pl. 730.

Calyx 5-phyllus. *Petala* 5. *Nectarium* 10-phyllum, germen tegens, staminiferum. *Capsula* 5-locularis.

cordifolium. 1. Z. (Heart-leav'd) foliis simplicibus oppositis sessilibus subrotundis. *Willd. sp. pl.* 2. *p.* 560.—*Hort. kew. ed.* 2. *v.* 3. *p.* 39.
Habitat C. B. S. G. H. ♄.
Floret Oct.
Introd. 1774.

Fabago. 2. Z. (Common) foliis conjugatis petiolatis: foliolis obovatis, pedunculis erectis, calyce glabro, petalis indivisis, caule herbaceo. *Willd. sp. pl.* 2. *p.* 560.—*Hort. kew. ed.* 2. *v.* 3. *p.* 40.
Habitat in Syria. H. ♃.
Floret Jul.—Sept.
Cult. 1596.

fœtidum. 3. Z. (Fœtid) foliis conjugatis petiolatis: foliolis obovatis, flore nutante, calyce pubescente, petalis incisis, caule fruticoso. *Willd. sp. pl.* 2. *p.* 561.—*Zygophyllum fœtidum. Schrad. sert. hannov.* 2. *p.* 17. *t.* 9.—*Hort. kew. ed.* 2.

v. 3. *p.* 40.—*Zygophyllum insuave. Bot. magaz.* 372.
HABITAT C. B. S. G. H. ♄.
FLORET per totam æstatem.
INTROD. 1790.
OBS. The disagreeable and rather rue-like scent of this plant is quite perceptible when standing near it.

Z. (Spotted-flower'd) foliis conjugatis petiolatis: foliolis lineari-lanceolatis. *Willd. sp. pl.* 2. *p.* 561.—*Hort. kew. ed.* 2. *v.* 3. *p.* 40. *maculatum.* 4.
HABITAT C. B. S. G. H. ♄.
FLORET Oct. Nov.
INTROD. 1782.

Z. (White) foliis conjugatis petiolatis: foliolis clavatis carnosis arachnoideo-incanis. *Willd. sp. pl.* 2. *p.* 561. *album.* 5.
HABITAT in Ægypto, inque Canariis. S. ♄.
FLORET ....
INTROD. 1779.

Z. (Four-leav'd) foliis conjugatis subpetiolatis, foliolis obovatis, caule fruticoso. *Mill. dict. no.* 3.—*Willd. sp. pl.* 2. *p.* 52.—*Hort. kew. ed.* 2. *v.* 3. *p.* 40.—*Fabago triphylla et tetraphylla, flore tetrapetalo, fructu membranaceo quadrangulari.* *Burm. afr.* 7. *t.* 3.—*Fabago capensis frutescens major.* *Dill. elth.* 142. *t.* 116. *f.* 141. *Morgsana.* 6.
HABITAT C. B. S. G. H. ♄.
FLORET Jun.—Aug.
CULT. 1732.

Z. (Sessile-leav'd) foliis conjugatis sessilibus: foliolis lanceolato-ovalibus margine scabris, caule fruticoso. *Willd. sp. pl.* 2. *p.* 563.— *sessilifolium.* 7.

Hort. kew. ed. 2. *v.* 3. *p.* 41.—*Fabago frutescens capensis minor. Dill. elth.* 142. *t.* 116. *f.* 142.
HABITAT C. B. S. G. H. ♄.
FLORET Jul. Aug.
CULT. 1713.

FAGONIA. *Gen. pl.* 731.

Cal. 5-phyllus. *Petala* 5, cordata. *Caps.* 3-locularis, 10-valvis: loculis 1-spermis.

cretica. 1. F. (Cretan) spinosa, foliolis lanceolatis planis lævibus. *Willd. sp. pl.* 2. *p.* 565.—*Hort. kew. ed.* 2. *v.* 3. *p.* 41.—*Bot. magaz.* 241.
HABITAT in Candia. G. H. ☉.
FLORET Jun.—Aug.
CULT. 1739.

arabica. 2. F. (Arabian) spinosa, foliolis linearibus convexis. *Willd. sp. pl.* 2. *p.* 565.—*Hort. kew. ed.* 2. *v.* 3. *p.* 41.
HABITAT in Arabia. G. H. ♂.
FLORET Jun. Jul.
CULT. 1759.

DIGYNIA.

TRIANTHEMA. *Gen. pl.* 762.

Calyx sub apice mucronatus. *Cor.* ☉. *Stam.* 5. 8. 10. *Germen* retusum. *Caps.* circumscissa.

monogyna. 1. T. (Purslane-leav'd) floribus pentandris, monogynis. *Willd. sp. pl.* 2. *p.* 635.—*Hort. kew. ed.* 2. *v.* 3. *p.* 64.
HABITAT in Jamaica. S. ☉.
FLORET Jul. Aug.
CULT. 1710.

TRIGYNIA.

ARENARIA. (Sandwort.) *Gen. pl.* 774.

Calyx 5-phyllus, patens. *Petala* 5, integra. *Caps.* 1-locularis, polysperma.

A. (Peplus-like) foliis ovatis acutis carnosis. *Peploides.* 1.
Willd. sp. pl. 2. *p.* 716.—*Hort. kew. ed.* 2. *v.* 3. *p.* 98.—*Eng. bot.* 189.

Habitat in Angliæ maritimis arenosis.—Yarmouth Denes, &c. H. ♃.

Floret Mai.—Jul.

STIPULARIA.

Cal. 5-phyllus. *Petala* 5, integra. *Caps.* 1-locularis, polysperma. *Semina* compressa, angulata, vel marginata. *Stipulæ* extrafoliaceæ, magnæ vaginantes scariosæ.

A. (Downy) foliis linearibus carnosis, stipulis *media.* 1.
membranaceis, caulibus pubescentibus.—*Arenaria media. Willd. sp. pl.* 2. *p.* 722.

Habitat in Gallia. H. ⊙.

Floret Jul.

Cult. ante 1795.

Simillima *A. rubræ maritimæ*, sed minus ramosa, caulibus majis adscendentibus, pubescentibus. *Folia* carnosa, linearia, acutiuscula, supra depressiuscula, subtus convexa, pubescentia. *Flores* albi, petalis calyce vix majoribus. *Semina* margine membranaceo cincta.

Dubiè propono plantam, quam Botanici Germanici, ob synonyma falsa, cum Spergula pentandra conjunxere, et quam Hudsonus in Flora anglica, p. 193. pro varietate Arenariæ

rubræ declarat; videtur tamen a binis nominatis plantis diversa. *Willd. l. c.*

Obs. Planta distincta. Olim vidi crescentem regio horto Kewense. Tota minutè tomentosa, (floribus exceptis) foliis teretibus carnosis.

pubescens. 2. * S. (Pubescent) caulibus foliisque linearibusque mucronulatis (internodium longitudine) pubescentibus: stipulis scariosis vaginantibus.—*Arenaria marina β. Smith's fl. br.* 2. *p.* 479.

Habitat in Anglia, infrequens. H. ☉.

Floret Jul.

marina. 3. S. (Marine) foliis semicylindricis carnosis muticis, stipulis scariosis vaginantibus, seminibus compressis marginatis glabris.—*Arenaria marina. Smith's fl. brit.* 2. *p.* 480.—*Eng. bot.* 958.—*Arenaria rubra β. Willd. sp. pl.* 2. *p.* 722.

Habitat in Angliæ maritimis limosis. H. ♃.

Floret Jun. Jul.

rubra. 4. S. (Purple) foliis linearibus mucronulatis, stipulis scariosis vaginantibus, seminibus compressis angulatis scabriusculis.—*Arenaria rubra. Smith. fl. brit.* 2. *p.* 479.—*Eng. bot.* 852.—*Arenaria rubra α. Willd. sp. pl.* 2. *p.* 721.

Habitat in Angliæ siccis campis. H. ♃.

Floret Jun.—Aug.

capensis. 5. * S? (Cape) ramis ramulisque gracilibus erectis subpedalibus, stipulis parvis, foliis erectis linearibus carnosis.

Habitat C. B. S. G. H. ♄.

Introd. 1809 a Dom. Cuff.

Flores non vidi.

Obs. I have lately seen this plant alive in Mr. Cuff's collection at Teddington, and have made the above minute of it from memory. He raised it from Cape seeds.

PENTAGYNIA.

COTYLEDON. (Navel Wort.) *Gen. pl.* 788.

Cal. 5-fidus. *Cor.* 1-petala, 5-fida. *Squamæ* nectariferæ 5, ad basin Germinis. *Caps.* 5.

* Frutescentes.

C. (Round-leav'd) foliis orbiculato-spathulatis farinoso-albis, obtusis cum acumine lævibus, floribus paniculatis, caudice erecto ramoso.—*Cotyledon orbiculata* δ. *Hort. kew. ed.* 2. *v.* 3. *p.* 108.—*Cotyledon orbiculata* γ. *Willd. sp. pl.* 2. *p.* 754. *orbiculata.* 1.

Habitat C. B. S. G. H. ♄.
Floret Jul.—Oct.
Cult. ante 1790.

C. (Ovate-leav'd) foliis ovato-spathulatis obtusis farinoso-albicantibus, cum acumine, lævibus rubroque marginatis: floribus paniculatis, caudice erecto ramoso.—*Cotyledon orbiculata* α. *Hort. kew. ed.* 2. *v.* 3. *p.* 108. —*Willd. sp. pl.* 2. *p.* 752.—*Plant. grass. cum icone.*—*Bot. magaz.* 321. *ovata.* 2.

Habitat C. B. S. G. H. ♄.
Floret Jul.—Oct.
Cult. ante 1795.

Obs. Miller in the eighth edition of his Dictionary describes a Cape Cotyledon by the

name of ovata, which I suppose may be the same as this, notwithstanding he says the leaves of his plant are of a "lively green colour."

oblonga. 3. † C. (Oblong-leav'd) foliis oblongo-spathulatis, obtusis (farinoso-albis ?) cum acumine lævibus; floribus paniculatis, caudice erecto ramoso.—*Cotyledon orbiculata β. Hort. kew. ed.* 2. *v.* 3. *p.* 108.—*Willd. sp. pl.* 2. 754.

HABITAT C. B. S. G. H. ♄.

FLORET Jul.—Sept.

INTROD. 1690. *Hort. kew. l. c.*

ramosissima. 4. C. (Many-branch'd) foliis ovato-spathulatis, obtusis cum acumine, lævibus farinoso-albis; floribus paniculatis; caudice ramosissimo divaricato.—*Cotyledon ramosissima. Mill. dict. ed.* 8.—*Cotyledon paniculata. Linn. supp.* 242 ?—*et Willd. sp. pl.* 2. 754 ?—*Cotyledon orbiculata γ. Hort. kew. ed.* 2. *v.* 3. *p.* 108.

HABITAT C. B. S. G. H. ♄.

FLORET ....

CULT. ante 1768. *Mill. dict. l. c.*

OBS. Like Miller, I have grown this plant near twenty years without ever having seen its flowers.

fascicularis. 5. † C. (Cluster'd) foliis cuneiformibus fasciculatis, caudice incrassato, ramis carnosis subconicis. *Willd. sp. pl.* 2. 109.—*Hort. kew. ed.* 1. *v.* 2. *p.* 106.—*et ed.* 2. *v.* 3. *p.* 109.—*Cotyledon frutescens, folio oblongo viridi, floribus ramosis pendulis reflexis. Burm. afr.* 41. *t.* 18.

HABITAT C. B. S. S. ♄.

FLORET Jul.—Sept.

CULT. 1759.

C. (Hemisphæric) foliis semiorbiculatis furfure punctatis, supra planis, floribus paucis parvis sessilibus.—*Cotyledon hemisphærica, Hort. kew. ed.* 2. *v.* 3. *p.* 109.—*Willd. sp. pl.* 2. *p.* 756.—*Cotyledon capensis, folio semiglobato. Dill. elth.* 112. *t.* 95. *f.* 111.—*Plant. grass. cum icone.* *hemisphærica.* 6.

HABITAT C. B. S. G. H. ♄.
FLORET Jul. (rariss.)
CULT. 1731.

C. (Narrow-leav'd) foliis spathulatis obtusis cum acumine nudis. *Hort. kew. ed.* 1. *v.* 2. *p.* 106.—*Willd. sp. pl.* 2. *p.* 754.—*Hort. kew. ed.* 2. *v.* 3. *p.* 109.—*Cotyledon africana frutescens, folio longo et angusto, flore flavescente. Comm. rar.* 23. *t.* 23. *spuria.* 7.

HABITAT C. B. S. S. ♄.
FLORET Jul. Aug.
CULT. 1731.

** ACAULES, *radicibus fibrosis.*

C. (Tufted) foliis glaucis angustè linguæformibus, apice obcuneatis submucronatis, floribus cymosis, ~~caule~~ folioso.—*Cotyledon cespitosa. Haworth. misc. nat. p.* 180.—*Cotyledon linguæformis. Hort. kew. ed.* 2. *v.* 3. *p.* 109. *cæspitosa.* 8.

HABITAT in California. *Hort. k. l. c.*
FLORET Jul. Aug. G. H. ♃.
INTROD. 1796.

OBS. *Herba* succulenta cæspitosa perennis nec frutescens. *Radix* fibrosa. *Folia* multifaria more Sempervivi, perglauca carnosa supra concava, subtus convexa; caulina (scapi erecti pedalis) pernumerosa cordatim-amplexicaulia, superiora sensim minora, suprema bracteacea. *Flores* mediocres. *Pedunculi* breves erecti

vel aliquantulum patuli. *Calyx* 5-partitus campanulatus, foliolis bracteiformibus. *Corolla* 5-petaloidea; *petala* lutea formâ foliorum, sed medium versus paulo latiora, erecta, apice patula. *Stamina* 10, albida compressa, sensim attenuata, petalis breviora. *Antheræ* lutescentes, polline luteo. *Styli* 5 subulati obclavati antherarum altitudine.

serrata. 9. C. (Notch-leav'd) foliis ovalibus crenatis caule spicato. *Willd. sp. pl.* 2. *p.* 757.—*Hort. kew. ed.* 2. *v.* 3. *p.* 109.—*Cotyledon crenata, folio oblongo fimbriato. Dill. elth.* 113. *t.* 95. *f.* 112.

HABITAT in Candia, Siberia. H. ♃.
FLORET Jun. Jul.
CULT. 1732.

hispanica. 10. C. (Spanish) foliis oblongis subteretibus, floribus fasciculatis. *Willd. sp. pl.* 2. *p.* 759.—*Hort. kew. ed.* 2. *v.* 3. *p.* 110.—*Plant. grass. cum icone.*

HABITAT in Africa, Oriente, Hispania. H. ♂.
FLORET Jun. Jul.
INTROD. 1796.

** TUBEROSÆ, *acaules radicibus tuberosis. An hujus generis?*

Umbilicus. 11. C. (Common Navelwort) foliis peltatis crenatis, caule subsimplici, floribus pendulis, bracteis integris. *Willd. sp. pl.* 2. *p.* 751.—*Hort. kew. ed.* 2. *v.* 3. *p.* 110.—*Eng. bot.* 325.—*Cotyledon umbilicus* ♀ *β tuberosa. Linn. sp pl.* 615.

HABITAT in Angliæ muris, rupibus. H. ♃.
FLORET Jun. Jul.

C. (Yellow) foliis peltatis crenatis, caule subsimplici, floribus erectis, bracteis dentatis. *Willd. sp. pl.* 2. 757.—*Hort. kew. ed.* 2. *v.* 3. *p.* 110.—*Eng. bot.* 1522.—Cotyledon umbilicus ♀ *α* repens. *Linn. sp. pl.* 615. *lutea.* 12.
Habitat in Anglia, rariss. H. ♃.
Floret Jun. Jul.

KALENCHOE.

Calyx 4-phyllus. *Corolla* 1-petala, ventricosa, limbo patenti-revoluto, 4-partito. *Squamæ* nectariferæ 4, ad basin germinis. *Capsulæ* 4.

K. (Yellow-flower'd) foliis oppositis carnosis oblongo-lanceolatis duplicato-crenatis viridibus; floribus cymoso-paniculatis.—*Kalenchoë crenata. Bot. magaz. cum icone.*—*Veria crenata. Bot. rep.* 1. *t.* 21.—*Cotyledon crenata. Hort. kew. ed.* 2. *v.* 3. *p.* 110.—*Willd. sp. pl.* 2. *p.* 471. *crenata.* 1.
Habitat in Sierra Leona. St. ♄.
Floret Jul.—Sept.
Cult. 1793.

K. (White-flower'd) foliis lato-lanceolatis, oppositis, crenatis, crassis: floribus paniculatis, terminalibus: corollis albentibus; laciniis oris acutiusculis. *Bot. repos.* 560.—*Veria acutiflora.* *acutiflora.* 2.
Habitat in India orientali? S. ♄.
Floret hyeme.
Introd. 1806.

K. (Cut-leav'd) foliis laciniatis.—*Cotyledon laciniata. Willd. sp. pl.* 2. *p.* 758.—*Hort. kew. ed.* 2. *v.* 3. *p.* 110.—*Kalenchoë laciniata.* *laciniata.* 3.

Plant. grass. cum icone.—Cotyledon afra laciniata, &c. Boerh. ind. 1. *p.* 288. *t.* 288.
HABITAT in India, Ægypto. S. ♄.
FLORET Jul. Aug. rarissimè.
CULT. 1731.

BRYOPHYLLUM.

Calyx longus vaginæformis. *Corolla* 1-petala, tubo rhombeo ore contracto; limbo 4-fido. *Stamina* 8, ad os tubi duplici serie inserta. *Pericarpia* 4, basi squamas tot melliferas excerentia.—*Parad. lond.* 3.

calycinum. 1. B. (Large-cup'd) calyce corolla multo breviore, parum 4-angulo.—*Par. lond. l. c.—Cotyledon pinnata. Lamarck. encycl.* 2. *p.* 141.—*Hort. kew. ed.* 2. *v.* 3. *p.* 111.
HABITAT in Mauritio et Moluccis. St. ♄.
FLORET Ap.—Jul.
INTROD. circa 1800.
OBS. This singular plant has the singular faculty of throwing out roots and young plants from the crenatures of its leaves, when they break off the plant, or are placed in or upon the ground; by which means a speedy increase is easily obtained. It forms a very distinct genus.

RHODIOLA.

Dioica Octandra. MAS. *Cal.* 4-partitus. *Cor.* 4-petala. FEM. *Nect.* 4. *Pist.* 4. *Caps.* 4. *Pers. syn.* 2. 625.

rosea. 1. R. (Rose-root) Sedum Rhodiola. *Plant. grass. t.* 143.
HABITAT in Britannia. H. ♃.
FLORET Jun.

ANACAMPSEROS. (Orpine.)

Raj. et Tournef.

Cal. 5-fidus. *Cor.* 5-petala. *Squamæ* nectariferæ 5, ad basin germinis. *Caps.* 5, ventricosæ, erectæ, s. stellatæ, extus inflato-gibbæ, apicibus recurvis. *Folia* plana carnosa sessilia, vel plus minus petiolata: radices perennes parum tuberosæ, vel incrassatæ. Generi priori fortè nimis affinis.

* TELEPHIA, *radicibus subtuberosis.*

A. (Great purple) foliis amplexicaulibus cordatim conjugatis ovatis obtusis inæqualiter altè serratis 3-4-uncialibus.—*Sedum Telephium ε maximum. Linn. sp. pl.* 1. 616.—*Sedum Telephium β maximum. Hort. kew. ed.* 2. *v.* 3. *p.* 111. *maxima.* 1. *

HABITAT in Hispania. H. ♃.

FLORET Jul. Aug.

CULT. ante 1794.

A. (Great white) foliis oppositis amplexicaulibus cordato-oblongis obtusis obtuseque serratis 2 3-uncialibus albicantibus.—*Sedum Telephium δ. Linn. sp. pl.* 1. 616. *albicans.* 2. *

HABITAT in Europa. H. ♃.

FLORET Jul. Aug.

CULT. ante 1794.

A. (Three-leav'd purple) foliis ternis verticillatis oblongis serratis; corymbis terminalibus.—*Sedum Telephium β purpureum. Linn. sp. pl.* 1. 616.—*Hort. kew. ed.* 2. *v.* 3. *p.* 111.—*Sedum verticillatum. Donn. hort. cantab. ed.* 6. 125. *triphylla.* 3. *

HABITAT in Lusitania (vix in Anglia). H. ♃.

FLORET Jul. Aug. at rarissimè.
INTROD. ante 1794.

vulgaris. 4. * A. (Small common) foliis alternis lanceolato-oblongis serratis.—*Sedum Telephium* γ. *Linn. sp. pl.* 616.—*Sedum Telephium* α *album. Hort. kew. ed.* 2. *v.* 3. *p.* 111.—*Telephium vulgare. Bauh. pin.* 287.
β foliis eleganter variegatis.
HABITAT in Angliæ ripis siccis. H. ♃.
FLORET Jul. Aug.

* *Orpineæ.*

semper-virens. 5. A. (Evergreen) foliis cuneiformibus basi attenuatis subsessilibus, caulibus decumbentibus, floribus corymbosis.—*Sedum anacampseros. Willd. sp. pl.* 2. *p.* 761.—*Hort. kew. ed.* 2. *v.* 3. *p.* 111.—*Bot. magaz.* 118.—*Plant. grass.* 33.
HABITAT in Gallia Australi. H. ♃. S. ♄.
FLORET Jul. Aug.
INTROD. ante 1596.
OBS. *Folia* superiora solum sempervirentia; cætera hyeme decidua.

Telephi-oides. 6. A. (Telephian) foliis planis ovatis, utrinque subacutis dentatis, floribus corymboso-fasciculatis.—*Sedum Telephioides. Mich. fl. americ.* 1. *p.* 277.—*Pers. synops.* 1. 511.
HABITAT in Carolinæ montibus altiss. Dom. Frazer, qui in Angliam introduxit, communicavit, anno 1810. H. ♃.
FLORET Aug.

Aizoon. 7. A. (Yellow Orpine) foliis lanceolatis serratis planis, caule erecto, cyma sessili terminali. *Willd. sp. pl.* 2. *p.* 761.—*Sedum Aizoon. Plant. grass.* 101.

Habitat in Siberia. H. ♃.
Floret Jul.—Sept.
Cult. 1757.

A. (Poplar-leav'd) foliis planis cordatis dentatis petiolatis, corymbis terminalibus.—*Sedum populifolium. Willd. sp. pl.* 2. *p.* 762.—*Bot. magaz.* 211.—*Plant. grass.* 110. *Populifolia.* 8.
Habitat in Siberia. H. ♄.
Floret Jul. Aug.
Introd. 1780.

A. (Straddling) foliis cuneiformi-rhombeis emarginatis petiolatis, caulibus ramosis, paniculis terminalibus divaricatis.—*Sedum divaricatum. Hort. kew. ed.* 1. *v.* 2. *p.* 108.—*et ed.* 2. *v.* 3. *p.* 112.—*Willd. sp. pl.* 2. *p.* 761.—*Pers. synops.* 1. 511.—*Sedum Aizoides. Plant. grass. ic.?* *divaricata.* 9. †
Habitat in Madeira. G. H. ♄.
Floret Jun. Jul.
Introd. 1777.

A. (Fringed) foliis cuneato-obovatis dentatis minute ciliatis; cyma sessili terminali. *ciliaris.* 10.
Habitat in monte Caucaso. H. ♃. *
Floret Aug.
Introd. ante 1810.
Obs. In Gardens this is sometimes called Sedum spurium: and in Kew Garden I have seen it ticketed S. dentatum: neither of which I believe are published names. But there is a work sometimes cited, on Caucasian plants, in which it probably may occur. The Sedum denticulatum of Donn's Catalogue I have no knowledge of. It is possibly the same.

A. (Hybrid) foliis cuneiformibus concavis subdentatis aggregatis, ramis repentibus, cyma *hybrida.* 11.

terminali.—*Sedum hybridum. Willd. sp. pl.* 2. *p.* 761.—*Hort. kew. ed.* 2. *v.* 3. *p.* 112.
HABITAT in Siberia. H. ♃.
FLORET Mai. Jun.
CULT. 1766.

ternata. 12. A. (Dwarf three-leav'd) foliis verticillatis obovatis integerrimis glabris, cyma subtristachya. —*Sedum ternatum. Hort. kew. ed.* 2. *v.* 3. *p.* 112.—*Mich. americ.* 1. *p.* 277.—*Sedum deficiens. Donn. hort. cant. ed.* 6. 126.
HABITAT in America Boreali. H. ♃.
FLORET Jul. Aug.
INTROD. 1789.
OBS. This species was known in Gardens till lately by the name of Sedum octagon.

stellata. 13. A. (Starry) foliis planiusculis angulatis, floribus lateralibus sessilibus solitariis.—*Sedum stellatum. Willd. sp. pl.* 2. *p.* 762.—*Hort. kew. ed.* 2. *v.* 3. *p.* 113.
HABITAT in Gallia, Italia. H. ⊙.
FLORET Jun. Jul.
CULT. 1640.
OBS. An hujus generis?

Cepæa. 14. A. (Purslane-leav'd) foliis planis lanceolatis, caule ramoso, floribus paniculatis, petalis acutis aristatis. *Willd. sp. pl.* 2. *p.* 763.—*Sedum Cepæa. Hort. kew. ed.* 2. *v.* 3. *p.* 113. —*Sedum spatulatum. Kit. hung. t.* 104.
HABITAT in Gallia, Helvetia. H. ⊙.
FLORET Jul. Aug.
CULT. 1610.

SEDUM. (Stone-crop.) *Gen. pl.* 789.

Cal. 5-fidus. *Cor.* 5-petala. *Squamæ* nectariferæ, ad basin germinis. *Caps.* 5. apicibus longis erectis. *Folia* teretia subulata succulenta basi præsingulariter soluta.

Obs. The plants of this and the last genus grow better upon old walls and rock-work than in the ground.

* Acutifolia.

S. (Great Stone-crop) floribus suboctopetalis, *altissi-*
foliis sparsis; inferioribus teretibus; superi- *mum.*
oribus depressis. *Encycl. bot.* 4. *p.* 634.— 1.
Plant. grass. cum icone.—Pers. synopsis, 512.—*Sempervivum sediforme. Jacq. hort. vind.* 1. *t.* 81.—*Jacq. misc. nat.* 1. *p.* 135. *t.* 5.—*Hort. kew. ed.* 1. *v.* 2. *p.* 149.—*et ed.* 2. *v.* 3. *p.* 173.—*Sedum ochroleucum. Smith. prod. fl. græc. p.* 312.—*Smith. in linn. soc. lond. tr. v.* 10. *p.* 6.

Habitat in Europa australi, Græcia. H. ♃.

Floret Jul.

Introd. 1769.

Obs. Dr. Smith has done well in removing this plant from Sempervivum to Sedum, as above stated; and in finding fault with the first edition of *Hortus kewensis* for not doing so; and, which is now still more faulty, in persevering in such error, in the *second* edition; after his remarks. But the Doctor has omitted to inform us, that the *Encyclop. bot.* (and Persoon in his compact *Synopsis*) had long before the merit of fixing this plant in its true genus, and with an admirable name: for in stature it far excels its kindred species.

In some gardens it is known by the name of *Sedum dioicum*; and is so named in the third edition of *Donn's Catalogue* printed in 1804.

reflexum. 2. S. (Reflex-leav'd) foliis subulatis sparsis glaucescentibus confertis semuncialibus basi solutis, senectis reflexis.—*Sedum reflexum. Willd. sp. pl.* 2. *p.* 764.—*Hort. kew. ed.* 2. *v.* 3. *p.* 113.—*Eng. bot.* 695.

β. minus.

HABITAT in Angliæ muris, tectis. H. ♃.

FLORET Jun. Jul.

OBS. Sedum *rupestre Plant. grass. vix differt, sed potius S. glauci varietas.*

septangulare. 3. * S. (Seven-rowed) foliis subulatis septemfariis glaucis confertissimis incurvo-adscendentibus fere semuncialibus basi solutis.

HABITAT in Europa? (vix in Anglia.) H. ♃.

FLORET Jun. Jul.

CULT. ante 1795.

OBS. Præcedenti simillimum, at ramis brevioribus, foliis longè compactioribus glaucioribus, magis incurvis, et manifestissimè septemfariis.

virens. 4. S. (Green) foliis subulatis sparsis viridibus basi solutis, floribus cymosis, petalis calyce lanceolato-sesquilongioribus. *Willd. sp. pl.* 2. *p.* 764.—*Hort. kew. ed.* 2. *v.* 3. *p.* 114.

HABITAT in Lusitania. H. ♃.

FLORET Jun. Jul.

INTROD. 1774.

glaucum. 5. * S. (Dwarf Glaucous) valdè ramosum, foliis subulatis sparsis perglaucis trilinearibus basi solutis.

HABITAT in Britannia. H. ♃.

FLORET Jun. Jul.
OBS. Species valdè distincta. Facies S. reflexi, at multoties minus, et alium.—variat
α. majus, ramis ramulisque elongatis reptantibus 4-uncialibus.
β. minus, ramis ramulisque magis compactis, erectioribus, 1-2-uncialibus.

S. (Rock) foliis subulatis sparsis basi solutis glaucis, floribus cymosis, petalis calyce duplo longioribus. *Willd. sp. pl.* 2. *p.* 764.—*Hort. kew. ed.* 2. *v.* 3. *p.* 114.—*Eng. bot.* 170.—*Sedum rupestre Plant. grass. est alium.* *rupestre.* 6.
HABITAT in Anglia. H. ♃.
FLORET Jul. Aug.

S. (Forsterian) foliis subulatis confertis multifariis patentibus basi solutis, floribus cymosis, calycis laciniis brevibus rotundatis. *Eng. bot.* 1802.—*Hort. kew. ed.* 2. *v.* 3. *p.* 114. *Forsteri.* 7.
HABITAT in Wallia. H. ♃.
FLORET Jul. Aug.

** OBTUSIFOLIA.

S. (Four-cleft) foliis sparsis teretibus obtusis, caule simplici, floribus umbellatis tetrapetalis. *Willd. sp. pl.* 2. *p.* 766.—*Pers. synopsis* 1. *p.* 512. *quadrifidum.* 8.
HABITAT in rupibus Asiæ borealis. H. ♃.
FLORET Jul.
INTROD. 1800.

S. (Naked-branch'd) foliis sparsis oblongo-cylindraceis obtusis, caulibus fruticosis ramosissimis, ramis tortuosis, cymis terminalibus. *Hort. kew. ed.* 1. *v.* 2. *p.* 112.—*Willd. sp. pl.* 2. *p.* 769.—*Hort. kew. ed.* 2. *v.* 3. *p.* 118. *Pers. synopsis* 1. 513. *nudum.* 9.

Habitat in Madeira. G. H. ♄.
Floret Jul.—Nov.
Introd. 1777.

album. 10. S. (White) foliis oblongis obtusis teretiusculis sessilibus patentibus, cyma ramosa. *Willd. sp. pl.* 2. *p.* 766.—*Hort. kew. ed.* 2. *v.* 3. *p.* 114.—*Eng. bot.* 1578.—*Plant. grass. cum icone.*
Habitat in Angliæ muris—prope Fulham, &c. H. ♃.
Floret Jun. Jul.

hispanicum. 11. S. (Spanish) foliis linearibus tereti-depressis sparsis, cyma patula, floribus hexapetalis. *Willd. sp. pl.* 2. *p.* 766.
Habitat in Hispania. H. ♃.
Floret Jun. Jul.
Introd. ante 1732.
Obs. Folia præglauca s. alba.

villosum. 12. S. (Villous) foliis oblongis supra planiusculis pedunculisque axillaribus subunifloris pubescentibus; petalis ovatis obtusiusculis. *Willd. sp. pl.* 2. *p.* 768.—*Hort. kew. ed.* 2. *v.* 3. *p.* 116.—*Eng. bot.* 394.—*Plant. grass. cum icone.*
Habitat in Anglia. ♃.
Floret Jun. Jul.

annuum. 13. S. (Annual) caule erecto solitario annuo, foliis ovatis sessilibus gibbis alternis, cyma recurva. *Willd. sp. pl.* 2. *p.* 768.—*Hort. kew. ed.* 2. *v.* 3. *p.* 114.
Habitat in Europa boreali. H. ☉.
Floret Aug.
Cult. ante 1739.

S. (Annual dark) caule erecto, floribus corymbosis fastigiatis. *Willd. sp. pl.* 2. *p.* 769. —*Plant. grass. cum icone.* *atratum.* 14.

Habitat in Italia—Helvetia, alpibus. H. ☉.

Floret Aug.

Cult. ante 1795.

Diversissima planta a Crassula rubente. *Caulis* erectus, pollicaris, ramis ad radicem duobus oppositis, altitudine caulis. *Folia* oblonga, basi soluta. *Pedunculi* alterni, uniflori, in corymbum fastigiatum digesti. *Calyces* atropurpurascentes. *Petala* alba, ovata, longitudine calycis. *Stamina* decem. *Germina* atropurpurascentia. *Willd. l. c.*

S. (Thick-leav'd) foliis oppositis ovatis obtusis carnosis, caule infirmo, floribus sparsis. *Willd. sp. pl.* 2. *p.* 763.—*Hort. kew. ed.* 2. *v.* 3. *p.* 113.—*Curt. lond. cum icone*—*Eng. bot.* 656.—*Plant. grass. cum icone.* *dasyphyllum.* 15.

Habitat in Angliæ muris, prope Kew, &c. H. ♃.

Floret Jun. Jul.

Obs. Although capable of resisting the greatest cold of our rigorous winters, if not over wet; this plant is capable of enduring even the heat of a hothouse, and flowering there. Every leaf if planted, or even laid upon the earth, will grow.

S. (Six-rowed) foliis subovatis adnato-sessilibus gibbis erectiusculis sexfariam imbricatis. *Willd. sp. pl.* 2. *p.* 767.—*Hort. kew. ed.* 2. *v.* 3. *p.* 115.—*Curt. lond. cum icone.*—*Eng. bot.* 1946.—*Plant. grass. cum icone.* *sexangulare.* 16.

Habitat in Anglia. H. ♃.

Floret Jun. Jul.

acre. 17. S. (Acrid) foliis obovatis adnato-sessilibus gibbis erectiusculis alternis, cyma trifida. *Willd. sp. pl.* 2. *p.* 767.—*Hort. kew. ed.* 2. *v.* 3. *p.* 115.—*Curt. lond. cum icone.*—*Eng. bot.* 839.—*Plant. grass. cum icone.*

Habitat in Angliæ siccis. H. ♃.

Floret Jun.

β. apicibus ramulorum eleganter flavis.

angli-cum. 18. S. (English) foliis obovatis adnato-sessilibus gibbis alternis, cyma ramosa, bifida. *Willd. sp. pl. p.* 2. 768.—*Hort. kew. ed.* 2. *v.* 3. *p.* 115. —*Eng. bot.* 171.

Habitat in Angliæ siccis. H. ♃.

Floret Jul. Aug.

α. minus.

β. varietas ex Hibernia.

PENTHORUM. *Gen. pl.* 790.

Cal. 5-fidus. *Petala* nulla ad quinque. *Caps.* 5-cuspidata, 5-locularis.

Sedoides. 1. P. (Sedum-like) *Willd. sp. pl.* 2. *p.* 770.—*Hort. kew. ed.* 2. *v.* 3. *p.* 116.

Habitat in Virginia. H. ♃.

Floret Jul. Aug.

Cult. 1768.

Obs. This plant obtains a place here, more on account of its near affinity to *Sedum*, than as a succulent plant, though it is a little so.

Classis XI.

DODECANDRIA

MONOGYNIA.

PORTULACCA. *Gen. pl.* 824.

Corolla 5-petala. *Calyx* 2-fidus. *Capsula* 1-locularis, circumscissa.

P. (Garden Purslane) foliis cuneiformibus carnosis, floribus sessilibus, caule ramisque suberectis. *Nobis misc. nat. p.* 136.—*P. oleracea β. Linn. sp. pl.* 1. 639.—*Willd. sp. pl.* 1. 859. *Portulacca oleracea. Hort. kew. ed.* 2. *v.* 3. *p.* 147.—*Portulacca latifolia, sativa. Bauh. pin.* 288. 1. *sativa.* 1.

HABITAT in America meridionali. H. ⊙.

FLORET Aug. Sept.

CULT. 1652.

OBS. Simillima sequenti, staturâ plus duplo majore, ramis ramulisque erectis, vel erectiusculis, nec prostratis humive depressis.

β. *(aurea)* foliis summis aureis. (Anglicè Golden Purslane.) *Nobis l. c.*

P. (Small Purslane) foliis cuneiformibus carnosis, floribus sessilibus, ramulis prostratis. *Nobis in misc. nat. p.* 136.—*P. oleracea. Linn. sp. pl.* 1. 638.—*Willd. sp. pl.* 1. 895.—*Plant. grass. cum icone.*—*Portulacca angustifolia sive sylvestris. Bauh. pin.* 288. 2. *oleracea.* 2.

HABITAT in Europa, et Jamaica. H. ⊙.

FLORET Aug. Sept.

CULT. 1582.

OBS. Rami ramulique semper plus minusve decumbentes seu prostrati, vel humi adpressi. *Nobis l. c.*

parvifolia. 3. * P. (Small-leav'd) ramosissima prostrata, foliis cuneiformibus minutis carnosis, floribus altè pedunculatis, sessilibusque.

HABITAT in Jamaica. St. ⊙.

FLORET Aug.

INTROD. 1799.

OBS. Forte præcedentium varietas, at longè minor, foliis decuplo (vel plus) minoribus.

quadrifida. 4. P. (Quadrifid) bracteis quaternis, floribus quadrifidis, caule geniculis pilosis. *Willd. sp. pl.* 2. *p.* 860.—*Hort. kew. ed.* 2. *v.* 3. *p.* 147.—*Jacq. collect.* 2. *p.* 356. *t.* 17. *f.* 4?—*Nobis misc. nat. p.* 137.

HABITAT in India orientali. S. ⊙.

FLORET Aug. Sept.

INTROD. 1773.

An hujus generis?

meridiana. 5. P. (Meridian) foliis ellipticis carnosis planis, geniculis pilosis, floribus sessilibus terminalibus. *Linn. sup. pl.* 248. *excluso synonymo Hermanni.*—*Willd. sp. pl.* 2. *p.* 861.—*Hort. kew. ed.* 2. *v.* 3. *p.* 148.—*Nobis misc. nat. p.* 137.

HABITAT in Ind. or. S. ⊙.

FLORET Mai. Jun.

INTROD. 1791.

OBS. Hanc speciem nec vivam neque siccam vidi.—An hujus generis?

pilosa. 6. P. (Hairy) foliis subulatis alternis: axillis pilosis, floribus sessilibus terminalibus. *Willd.*

sp. pl. 2. *p.* 86.—*Hort. kew. ed.* 2. *v.* 3. *p.* 147.—*Mill. dict. ed.* 8. *no.* 2.—*Nobis misc. nat. p.* 137.—*Com. hort. amst.* 1. *t.* 5.

HABITAT in Ind. occ. S. ♂.

FLORET Jun.—Oct.

CULT. 1790.

TALINUM. *Juss. gen.* 312.

Corolla 5-petala. *Calyx* 2-phyllus. *Capsula* 3-valvis, polysperma.

T. (Triangular) foliis planis canaliculatis cuneiformibus emarginatis mucronatis, racemo simplici: pedunculo triquetro. *Willd. sp. pl.* 2. *p.* 862.—*Hort. kew. ed.* 2. *v.* 3. *p.* 148.—*Portulacca triangularis. Jacq. obs.* 1. *p.* 35. *t.* 23. —*Portulacca racemosa. Nobis miscel. nat. p.* 139. *triangulare.* 1.

HABITAT in Ind. occ. St. ♄.

FLORET Aug. Sept.

CULT. 1739.

T. (Thick-leav'd) foliis planis obovatis mucronatis, corymbo elongato, pedunculis triquetris. *Willd. sp. pl.* 2. 862.—*Jacq. hort. vindob.* 3. 52.—*Nobis misc. nat. p.* 140. *crassifolium.* 2.

HABITAT .... S. ♄.

FLORET Aug. Sept.

INTROD. ante 1800.

An satis a præcedenti distinctum?

T. (Spreading-flower'd) foliis ovatis planis, panicula terminali, pedunculis dichotomis. *Willd. sp. pl.* 2. 863.—*Jacq. hort. vind.* 1. 151.—*Hort. kew. ed.* 2. *v.* 3. *p.* 148. *(excluso synonymo longissimè discrepante Bot. rep.)*—*Nobis misc. nat. p.* 140. *patens.* 3.

HABITAT in America meridionali. St. ♂.

FLORET Aug.—Oct.
INTROD. 1776.
OBS. Flores rubri.

reflexum. 4. T. (Reflex-flower'd) foliis lanceolato-ovatis sessilibus oppositis, florum panicula ramosa. *Cav. ic.* 1. *p.* 1. *t.* 1.—*Nobis misc. nat. p.* 141.—*Talinum patens* β. *Willd. sp. pl.* 1. 863.

HABITAT in America meridionali. S. ♂. s. ⊙.
FLORET Aug.—Oct.
INTROD. ante 1800.
OBS. Præcedenti longè elatius, floribus luteis, magis paniculatis.
OBS. This is a more tender plant than the preceding. Both seed very freely.

RÜLINGIA. *(Ehrhr. beit.)*

Corolla 5-petala. *Calyx* diphyllus. *Capsula* tenuiter conica unilocularis demum 6-valvis, valvis deciduis. *Semina alata.* Suffrutices præsucculentæ, foliis gibbis, difformibus. *Stipulæ* intrafoliaceæ, laceratæ, filamentiformes.

Anacampseros. 1. R. (Great) foliis ovatis difformibus glabris viridibus, pedunculis teretibus elongatis subpaniculatis. *Portulacca Anacampseros. Linn. sp. pl.* 1. 639.—*Hort. kew. ed.* 2. *p.* 128.—*Mill. dict. ed.* 8. *no.* 3.—*Nobis misc. nat. p.* 141.—*Talinum Anacampseros. Willd. sp. pl.* 2. *p.* 862.—*Hort. kew. ed.* 2. *v.* 3. *p.* 148.—*Plant. grass. cum icone.*—*Anacampseros foliis acuminatis. Linn. hort. cliff.*—*Linn. hort. ups.*

HABITAT C. B. S. S. ♄.
FLORET Jul. Aug.
CULT. 1732.
OBS. Dr. Sims in *Bot. magaz.* has thought it

eligible to adopt the discarded Linnæan generic name of *Anacampseros* for this plant and its kindred, in compliance with a suggestion of mine in *Miscellanea naturalia*;—but on more mature consideration it appears more desirable to retain Ehrhrart's name of *Rülingia* for them; and to restore the more ancient one of *Anacampseros* of Ray and Tournefort, to the plants they intended by it; viz. *Sedum Anacampseros Linn.* and its flat-leaved affinities.

R. (Cobweb) foliis ovatis acuminatis difformibus viridibus lucidis arachnoideis, racemo simplici, pedunculis teretibus elongatis. *Portulacca arachnoides. Nobis misc. nat. p.* 142.—*Anacampseros arachnoides. Bot. magaz.* 1368.—*Hort. kew. ed.* 2. *v.* 3. *p.* 149. *arachnoides.* 2. *

HABITAT C. B. S? S. ♄.
FLORET Aug. Sept.
CULT. circa 1790.

R. (Red-leav'd) foliis ovatis acuminatis difformibus lucidis atrorubentibus arachnoideis, apicibus respicientibus, racemo simplici, pedunculis longissimis.—*Portulacca rubens. Nobis misc. nat. p.* 142. *rubens.* 3. *

HABITAT C. B. S? S. ♄.
FLORET Aug. Sept.
CULT. ante 1796.

R. (Thready) foliis imbricatis expansis atroviridibus arachnoideis, supernè rugosis; filamentis axillaribus folio longioribus. *Portulacca filamentosa. Nobis misc. nat. p.* 142.—*Anacampseros filamentosa. Bot. magaz.* 1367.—*Hort. kew. ed.* 2. *v.* 3. *p.* 149. *filamentosa.* 4. *

HABITAT C. B. S. S. ♄.

FLORET Aug. Sept.
INTROD. ante 1795.

lanceolata. 5. * R. (Spear-leav'd) foliis lanceolatis carnosis, subtus convexis, scapo folioso brevi subunifloro.—*Portulacca lanceolata. Nobis misc. nat. p.* 142.
HABITAT C. B. S? S. ♃.
FLORET Aug. Sept.
INTROD. ante 1796.

TRIGYNIA.

EUPHORBIA. *Gen. pl.* 823.

Calyx 1-phyllus, turbinatus, quinquefidus, *laciniis* supernè orbiculiformibus crassis expansis. *Petala* 0 vel 5, flavicantia intra calycem et ei adnata, pectinata, dentibus circiter sex. *Paleæ* minutissimæ numerosæ erectæ supernè ramosæ, albæ ramentaceæ reconditæ inter *stamina* medio articulata. *Antheræ* didymæ. *Capsula* 3-cocca pedunculata. *Suffrutices* præsucculenti lactescentes, nudi, vel rariùs seminudi, angulis aculeatis.

* ACULEATÆ, *Nudæ, foliolis inconspicuis, vel omnino nullis.*

Scolopendrea. 1. E. (Scolopendra) nuda apice incurvo-uncinata, subcompressa, hinc convexa, inde concava, aculeis geminis divergentibus.—*Euphorbia Scolopendria, Hortorum, et Donn. cat. hort. cant. ed.*3—6. *p.*131.—*Euphorbia procumbens.* —*Radix tuberosa extus rugosa, fusca, Cyclaminis radici simillima.—Ramuli rariores nudi, lineis exarati, aculeis instructi procumbentibus. Meerburg. Rariores, tab.* 55.—(OBS. *radicem tuberosam non vidi. Fortè in senectissi-*

mis solùm adest. H.)—Euphorbia uncinata. Plant. grass. cum icone.—Pers. synopsis 2. 10.—*Hort. kew. ed.* 2. *v.* 3. *p.* 155.
Habitat C. B. S.
Floret Jun.—Aug.
Introd. 1794.

E. (Upright triangular) nuda erecta aculeata, triangularis, articulata, ramis erectis, subcanaliculatis. *Euphorbia (trigonum) aculeata nuda triangularis, articulata, ramis erectis. Mill. dict. ed.* 8. *no.* 3.—*Euphorbia antiquorum β. Linn. sp. pl.* 1. 646. *trigona.* 2.
Habitat in India orientali. S. ♄.
Floret Jul. Aug.
Cult. ante 1768.

E. (Spreading triangular) erecta aculeata triangularis subnuda articulata: ramis expansis subgeminatis.—*Euphorbia antiquorum. Linn. sp. pl.* 1. 646.—*Mill. dict. ed.* 1. *no.* 8.—*Willd. sp. pl.* 2. *p.* 881.—*Pers. synops.* 2. 10.—*Hort. kew. ed.* 2. *v.* 3. *p.* 155.—*Euphorbia antiquorum verum. Comm. hort. amst.* 1. *p.* 23. *t.* 12. *antiquorum.* 3.
Habitat in India orientali. S. ♄.
Floret Jul. Aug.
Cult. 1688.
Obs. Magna erecta, ramis expansis subrepandis, foliolis perpaucis minutis supernè, sessilibus subrotundo-cordatis deciduis.

E. (Marbled triangular) nuda, aculeata, articulata, ramis triquetris, subexpansis farctis, solitariis viridibus, albo obsoletè marmoratis. *lactea.* 4.
Habitat in India orientali. S. ♄.
Floret ....

INTROD. 1804.
OBS. Præcedenti fere duplo minor, foliolis simillimis, at minoribus.

canariensis. 5. E. (Canary 4-angled) nuda tetraquetra, aculeis geminatis uncinatis, floribus subsessilibus. —*Euphorbia canariensis. Willd. sp. pl.* 2. *p.* 882.—*Hort. kew. ed.* 2. *v.* 3. *p.* 156.—*Plant. grass. cum icone.*
HABITAT in Canariis. S. ♄.
FLORET Mar. Apr.
CULT. 1697.

heptagona. 6. E. (Seven-angled) aculeata nuda septangularis, spinis solitariis subulatis floriferis. *Willd. sp. pl.* 2. *p.* 883.—*Hort. kew. ed.* 2. *v.* 3. *p.* 156.
HABITAT C. B. S. S. ♄.
FLORET Jul.—Nov.
CULT. 1731.
nigra. α. heptagona, spinis nigricantibus.
rubra. β. 6-7-gona, humilior, ramosior, spinis brevioribus, summis ruberrimis.

enneagona. 7. * E. (Nine-angled) aculeata nuda erecta subenneagona, aculeis solitariis floriferis adscendentibus subfuscis, ramulis pendulis. *Haworth. misc. nat. p.* 184.
HABITAT C. B. S? S. ♄.
FLORET Jul.—Nov.
CULT. ante 1790.

mammillaris. 8. E. (Wart-angled) aculeata seminuda, angulis tuberculatis spinis interstinctis, tuberculis junioribus folio instructis. *Wild. sp. pl.* 2. *p.* 883.—*Hort. kew. ed.* 2. *v.* 3. *p.* 156.—*Tithymalus aizoides africanus, validissimis spinis ex tuberculorum internodiis provenientibus. Comm. prælud.* 59. *t.* 9.

Habitat ad Caput Bonæ Spei. S. ♄.
Floret Jul. Aug.
Cult. 1759.

E. (Cereus-like) aculeata nuda multangularis, spinis solitariis subulatis. *Willd. sp. pl.* 2. *p.* 883.—*Hort. kew. ed.* 2. *v.* 3. *p.* 156. *Cereiformis.* 9.
Habitat C. B. S. S. ♄.
Floret Jul.—Oct.
Cult. 1731.
Obs. Seedling plants have the short but ramose habit of the Medusa's-head Spurges. When struck from long cuttings, they assume a different appearance, only branching at the top.

E. (Officinal) aculeata nuda multangularis, aculeis geminatis. *Willd. sp. pl.* 2. *p.* 884.—*Hort. kew. ed.* 2. *v.* 3. *p.* 157.—*Plant. grass. cum icone.* *officinarum.* 10.
Habitat in Africa. S. ♄.
Floret Jun. Jul.
Cult. 1597.

E. (Many-angled) aculeata nuda, caudicibus numerosis simplicibus erectis, 10—13-gonis, aculeis solitariis floriferis expansis atris. *Haworth. misc. nat. p.* 184. *polygona.* 11. *
Habitat C. B. S? S. ♄.
Floret Jul.—Sept.
Cult. ante 1790.

E. (Melon-shaped) inermis subglobosa multangularis. *Willd. sp. pl.* 2. *p.* 886.—*Bot. rep.* 617.—*Plant. grass. cum icone.*—*Annals of botany*, 1. *p.* 122. *t.* 2. *Meloformis.* 12.
Habitat C. B. S. G. H. ♄.
Floret Jun.—Oct.
Introd. 1774.
β. suboblonga cucumeriformis.

Obs. Hæc species dioica est. Nostræ plantæ sunt mares.

** Aculeatæ *seminudæ, supernè foliis paucis distantibus magnis.*

Nereifolia. 13. E. (Oleander leav'd) aculeis geminatis, angulis obliquè tuberculatis supernè foliosis, foliis oblongis. *Willd. sp. pl.* 2. *p.* 884.—*Hort. kew. ed.* 2. *v.* 3. *p.* 157.—*Plant. grass. cum icone.*

Habitat in India. S. ♄.

Floret Jun. Jul.

Introd. 1690.

β. Chinensis—— minor ramis subinde compressis.

Habitat in China.

Floret . . . . G. H. ♄.

Cult. 1809.

varians. 14. * E. (Variable-stemm'd) aculeis geminatis; caule teretiusculo angulatove; angulis oblique tuberculatis, supernè foliosis, foliis suboblongis.

Habitat in India orientali. S. ♄.

Floret . . . .

Cult. circa 1800.

grandifolia. 15. * E. (Great-leav'd) aculeis geminatis horizontalibus, basi latè confluentibus stipulaceis; caule tereti simplici, supernè foliis oblongo-spathulatis, costâ subtus deorsum carinatâ.

Habitat in Sierra Leona. S. ♄.

Floret . . . .

Introd. circa 1798.

Obs. Folia maxima omnium fere pedalia, horizontali-subrecurvula perviridia; petiolis subuncialibus.

TREISIA. *Euphorbia Linn.*

Involucri triphylli folia infernè attenuata, supernè crenulata. *Stigmata* bipartita revoluta apicibus subglobosis. Cætera fere Euphorbiæ, absque paleis. *Caules* teretes inermes virides ramulis simplicibus non confertis imbricatim subtuberculatis, tuberculis junioribus foliolo longo finientibus. *Pedunculi* axillares persistentes longi solitarii erecti spinæformes, plus minus bracteolati, involucro absolutè triphyllo! unifloro terminati.

T. (Club) imbricata, tuberculis foliolo lineari-lanceolato; pedunculis pubescentibus persistentibus, bracteatis, bracteis obovato-cuneatis subintegris, petalis pectinato-serratis. *clava.* 1.
Euphorbia (clava) inermis imbricata, tuberculis foliolo lineari-lanceolato instructis, floribus pedunculatis, petalis integerrimis. Willd. sp. pl. 2. *p.* 888.—*Jacq. ic.* 1. *t.* 85.—*Euphorbium acaulon, erectum, tuberosum, linearibus foliis, flore ac fructu foliaceis. Burm. afr.* 12. *t.* 6. *f.* 1.
Habitat ad Caput Bonæ Spei. G. H. ♄.
Floret Mar.—Aug.
Introd. 1774.
Obs. I suspect Euphorbia Bupleurifolia may belong to this genus, but I know not its flowers.

T. (Porcupine) spinosissima: caule tereti seminudo supernè folioso, foliis lanceolato-linearibus, pedunculis unifloris, persistentibus demum spinosis; petalis ciliato-pectinatis.—*Euphorbia Hystrix. Willd. sp. pl.* 2. *p.* 885.— *Hystrix.* 2.

Hort. kew. ed. 2. v. 3. p. 157.—Jacq. hort. schœnbr. 2. t. 207.

HABITAT ad Caput Bonæ Spei. G. H. ♄.

FLORET Jan.—Sept.

CULT. ante 1695.

OBS. *Flores* in nostra planta semper masculini, *pedunculi* longi graciles subulati corallini, perparce bracteati, vel nudi; absque pubescentia.

DACTYLANTHES. (Finger-flower.) *Euphorbia Linn. &c.*

Cal. 4-5-partitus laciniis expansis carnosis lacunosis altè digitatis. *Caps.* 3-cocca. Cætera (exceptis paleis petalisque) *Euphorbiæ*, at caulibus inermibus teretibus viridibus subimbricatim tuberculatis, tuberculis supremis apice folioliferis, foliolo ovato expanso.

Character ex sicc.

patula. 1. D. (Spreading) inermis ramis teretibus flagelliformibus tuberculis quadrigonis. *Euphorbia patula. Mill. dict. ed.* 8.

HABITAT C. B. S? G. H. ♄.

FLORET Aug.

CULT. ante 1768.

OBS. *Rami* fere prostrati elongati flagelliformes, parum ramosi, ramulis apice rarius floriferis. *Flores* solitarii longè pedunculati, foliolis *calycinis* expansis carnosis rugosis albis, instar floris Stapeliæ, at præsingulariter palmatis, vel potius digitatis.

anacantha. 2. D. (Scaly) inermis imbricata, tuberculis foliolo subrotundo instructis, floribus terminalibus solitariis sessilibus, petalis palmatis *Hort. kew. ed.* 1. *v.* 2. *p.* 136; *Euphorbia anacantha, ed.* 2. *v.* 3. *p.* 159.—*Willd. sp. pl.* 2. *p.* 888.

—*Pers. synops.* 2. 11.—*Euphorbium erectum aphyllum, ramis rotundis, tuberculis tetragonis. Burm. afr.* 16. *t.* 7. *f.* 2.—*Bradley's succ.* 5. *p.* 12. *t.* 45.
HABITAT C. B. S. G. H. ♄.
FLORET Aug.
CULT. ante 1727.

D. (Tubercled) inermis imbricata, tuberculis compressis acutis foliolo lineari instructis, floribus longe pedunculatis, petalis palmatis. *Willd. sp pl.* 2. *p.* 887.—*Euphorbia tuberculata. Jacq. hort. schœnb. t.* 208. *tuberculata.* 3.
HABITAT C. B. S. G. H. ♄.
FLORET ....
INTROD. 1805.

D? (Hook'd) tuberculis magnis subimbricatis, apice fere recurvo-hamæformibus, supremis foliolo 2-3-lineari ovali demum marcescenti finientibus.—*Euphorbium caule rotundo, foliolis hamatis, flore quadrifido, flavo. Burm. afr. t.* 6. *f.* 3. *hamata.* 4. *
HABITAT ad C. B. S. G. H. ♄.
FLORET ....
INTROD. 1795.
OBS. As Burman represents this plant with a quadrifid and quinquefid involucrum, it may not belong to this genus; but until I can see its flowers, I know not where else to place it.

MEDUSEA. *Euphorbia Linn. &c.*

Calyx 4-5 partitus laciniis patentibus digitato-pectinatis. *Capsula* tricocca. Cætera fere Euphorbiæ, exceptis paleis; at *caulibus* inermibus teretibus viridibus, *ramulis* simplicibus capitato-.s. verticillato-confertis effusis

perviridibus, (caput Medusæ simulantibus) imbricatim tuberculatis, tuberculis junioribus apice foliolo lineari suberecto semper finientibus.

procumbens. 1. M. (Least Medusa's head) inermis ramis teretibus procumbentibus, tuberculis quadrigonis. —*Mill. dict. ed.* 8. *Euphorbia* 12.—*Euphorbium humile procumbens, ramis simplicibus copiosis, caule crassissimo tuberoso. Burm. afr. t.* 10. *f.* 1.

HABITAT C. B. S. G. H. ♄.
FLORET ....
CULT. ante 1768.

Fructus-pini. 2. M. (Small Medusa's head) inermis imbricata tuberculis foliolo lineari instructis.—*Mill. dict. ed.* 8. *Euphorbia* 10.—*Euphorbia Caput Medusæ, inermis imbricata, tuberculis folio lineari instructis, floribus subpedunculatis, petalis palmatis, var.* β. *Hort. kew. ed.* 2. *v.* 3. *p.* 158.

HABITAT C. B. S. G. H. ♄.
FLORET Aug.
CULT. 1731.

β. ramis sæpe geminatis.—*Euphorbia Caput Medusæ* γ. *Hort. kew. ed.* 2. *v.* 3. *p.* 158.—*Euphorbia procumbens, ramis geminatis, caule glabro oblongo cinereo. Burm. afr.* 18. *t.* 9. *f.* 1.

major. 3. M. (Great Medusa's head) inermis tuberculis imbricatis, foliolo lineari instructis.—*Mill. dict. ed.* 8. *Euphorbia* 7.—*Euphorbia Caput-medusæ* α. *Hort. kew. ed.* 2. *v.* 3. *p.* 158.—*Tithymalus Aizoides africanus, simplici squamato caule. Comm. præl.* 57. *t.* 7.

HABITAT C. B. S. G. H. ♄.
FLORET Aug.
CULT. 1731
OBS. Pedalis ad sesquipedalem, superne ramis effusis, confertis.

β. Longe humilior, ramis numerosioribus, prope terram effusis.—*Euphorbia procumbens, ramis plurimis simplicibus squamosis, foliolis deciduis. Burm. afr. t.* 8.—*Euphorbia Caput-medusæ* δ. *Willd. sp. pl.* 2. *p.* 887.—*Euphorbia (inermis) ramis plurimis procumbentibus, squamosis, foliis deciduis.*—*Mill. dict. ed.* 8. *Euphorbia* 13.
HABITAT C. B. S. G. H. ♄.
FLORET Aug.
CULT. ante 1768.
OBS. Merè planta seminalis.

M. (Checquer'd Medusa's head) caule pedali ad sesquipedalem, tuberculis densè tessellatis, supernè confertim ramoso. ***tessellata.*** **4.**
HABITAT .... (Ex Lusitania accepi anno 1788.) G. H. ♄.
FLORET Aug.
OBS. Tuberculæ densiores quam in præcedente, numerosiores, spiraliter multifariæ, atque eleganter tessellatim dispositæ. Supremæ foliolis linearibus finientes.
OBS. All the Greenhouse species of this genus should have as much air as Mesembryanthema; otherwise they will draw up weak, and lose their characteristic distinctions. Most of them will live in a glass case without fire if kept dry in winter, and matted up from the effects of frost.

CREPIDARIA. (Slipper-spurge.) *Euphorbia. Linn. &c.—Tithymaloides. Tournef.—Tithymalus. Mill. dict. ed.* 8.

Calyx monophyllus dentato-tripartitus. *Corolla* monopetala calceoliformi carnosa. *(Mill. dict. l. c.)* —Cætera *Tithymalorum* infra.

Myrtifolia. 1. C. (Myrtle-leav'd) foliis ovatis acuminatis. —*Tithymalus Myrtifolius. Mill. dict. l. c.—Euphorbia Tithymaloides Myrtifolius. Willd. sp. pl.* 2. *p.* 80.—*Hort. kew. ed* 2. *v.* 3. *p.* 160.—*Tithymalus curassavicus myrtifolius, flore coccineo mellifero. Herm. parad.* 234. *cum icone.—Euphorbia carinata. Donn. hort. cant. ed.* 6.

HABITAT prope Carthagenam. S. ♄.

FLORET Jun. Jul.

CULT. ante 1699.

OBS. *Folia* plana crassa viridia, ad costam subtus profundè carinata.

Padifolia. 2. C. (Padus-leav'd foliis oblongo-ovatis obtusis succulentis.—*Tithymalus Laurocerasifolius. Mill. dict. ed.* 8. *no.* 2.—*Euphorbia Tithymaloides* β. *Padifolia. Willd. sp. pl.* 2. *p.* 891.—*Hort. kew. ed.* 2. *v.* 3. *p.* 160.—*Euphorbia (Anacampseroides) inermis fruticosa, foliis alternis obovatis obtusis, subtus acutè carinatis. Lamarck. encycl.* 2. *p.* 4`6.—*Tithymaloides laurocerasifolia, folio non serrato. Dill. elth. t.* 288. *f.* 372.

HABITAT in Ind. occ. S. ♄.

FLORET Jun. Jul.

CULT. ante 1699.

cordellata. 3. * C? (Small Heart-leav'd) inermis fruticosa, simplex, foliis alternis cordatis recurvis sessilibus diminutis.—*Euphorbia cordellata. Haworth. misc. nat. p.* 185.

HABITAT .... S. ♄.
FLORET ....
CULT. circa 1795.
OBS. The old genus *Tithymaloides* of Tournefort and Dillenius is here restored, but with a new name alluding to its slipper-shaped flowers; the termination of the old one being inadmissible; and that of Miller altered to *Tithymalus*, belonging with more propriety to the following genus.

TITHYMALUS. *Tournef.—Euphorbia. Linn.*

Flores sparsi, capitulati, s. aggregati, nec umbellato-involucrati. *Involucella* bracteacea diphylla. *Calyx* 4-5 partitus, laciniis integris supernè rotundatis. *Caules* inermes seminudi uniformes virgati foliorum vestigiis sæpe cicatricati.

* TUBEROSI. *Caudice brevi tuberoso.*

T. (Tuberous) umbella trifida, involucro diphyllo, caudice tuberoso, foliis cordato-oblongis emarginatis deciduis.—*Euphorbia tuberosa. Willd. sp. pl.* 2. *p.* 905.—*Nobis in misc. nat. p.* 185.—*Tithymalus tuberosus acaulos, foliis oblongis cucullatis et planis. Burm. afr.* 9. *t.* 4. *tuberosus.* 1.
HABITAT in Æthiopia. G. H. ♄.
FLORET Oct.—Dec.
INTROD. circa 1800.
OBS. *Foliorum* margines venæque subtus ciliato-pubescentes. *Caudex* crassus, 1—3 uncialis lobato-ramosus irregularis, absque squamis tuberculisve.
OBS. At the time this plant was named Euphorbia tuberosa in my Miscellanea, I was

unaware of its having been described by Linnæus, and had not then seen Burman's figure of the adult plant.

Bupleurifolius. 2. T? (Conical) inermis capitatus imbricatus, tuberculis subrhombeis, foliis lanceolatis petiolatis, pedunculis unifloris, petalis integerrimis, bracteis flore longioribus.—*Willd. sp. pl.* 2. *p.* 888. *(Euphorbia Bupleurifolia.) Hort. kew. ed.* 2. *v.* 3. *p.* 158.—*Jacq. hort. schœnbr.* 1. *t.* 106.

Habitat ad Caput Bonæ Spei. S. ♄.

Floret Jun. Jul.

Introd. 1791.

Obs. From the tuberculated caudex, I have but little doubt of this being a species of *Treisia.* I once saw Jacquin's figure above cited, but have forgot his delineation of the flowers.

** Graciles. *Caulibus fruticosis, seminudis.*

bracteatus. 3. T? (Bracteated) inermis, fruticosus; foliis oblongis, alternis, distichis; bracteis persistentibus. *(Euphorbia bracteata.) Jacq. hort. schœnbr. v.* 2. 14. *t.* 276.

Habitat .... St. ♄.

Floret ....

Introd. ante 1809.

pendulus. 4. * T? (Pendulous) fruticosus, inermis, nudus, ramulis teretibus effuso-dependentibus subarticulatis.

Habitat .... St. ♄.

Floret ....

Introd. ante 1808.

Obs. Omnino simillimus Cacto pendulo, Linn. at robustior, et lactescit. Etiam simulat Ceropegiam aphyllam, at crassior.

T. (Indian Tree-spurge) inermis, seminudus fruticosus filiformis erectus, ramis patulis determinatè confertis. (*Euphorbia Tirucalli*) *Willd. sp. pl.* 2. *p.* 890.—*Hort. kew. ed.* 2. *v.* 3. *p.* 159.—*Tiru calli. Rheed. mal.* 2. *p.* 85. *t.* 44.—*Ossifraga lactea. Rumph. amb.* 7. *p.* 62. *t.* 29. *Tirucalli.* 5.
HABITAT in India orientali. St. ♄.
FLORET . . . .
INTROD. 1690.

T. (Barbary) inermis seminudus fruticosus filiformis flaccidus, foliis alternis. (*Euphorbia mauritanica*) *Willd. sp. pl.* 2. *p.* 889.—*Hort. kew. ed.* 2. *v.* 3. *p.* 159.—*Tithymalus aphyllus mauritaniæ. Dill. elth. t.* 289. *f.* 373. *mauritanicus.* 6.
HABITAT in Africa. G. H. ♄.
FLORET Jun.—Aug. at rariss.
INTROD. 1732.

T. (Twiggy) seminudus fruticosus tenuis, foliis linearibus, pedunculis unifloris. (*Euphorbia virgata*) *Pers. synops.* 2. 11.—*Euphorbia mauritanica. Lamarck. enc.* 2. *p.* 418. *virgatus.* 7.
HABITAT in Africæ maritimis. G. H. ♄.
FLORET . . . .
INTROD. circa 1808.

T. (Smooth spear-leav'd) inermis fruticosus strictus, umbellis quinquefidis terminalibus, involucellis oblongis, foliis lanceolatis lævibus. (*Euphorbia piscatoria*) *Willd. sp. pl.* 2. *p.* 889.—*Hort. kew. ed.* 2. *v.* 3. *p.* 159. *piscatorius.* 8.
HABITAT in Madeira. G.H. ♄.
FLORET Jul.
INTROD. 1777.

balsamiferus. 9. † T. (Balsam) inermis fruticosus strictus, capitulo terminali, foliis lanceolatis lævibus glaucis. *Willd. sp. pl.* 2. *p.* 889.—(*Euphorbia balsamifera*) *Hort. kew. ed.* 1. *v.* 2. *p.* 137;—*ed.* 2. *v.* 3. *p.* 159.

HABITAT in Canariis. S. ♄.

FLORET ....

INTROD. 1799.

OBS. An a penultimo satis distinctus?

puniceus. 10. T. (Scarlet) umbella quinquefida; trifida, involucellis ovalibus acuminatis coloratis, capsulis glabris, foliis obovato-lanceolatis subtus glaucis. (*Euphorbia punicea*) *Willd. sp. pl.* 2. *p.* 916.—*Smith. icones pictæ, t.* 3.—*Hort. kew. ed.* 2. *v.* 3. *p.* 167.

HABITAT in Jamaica. S. ♄.

FLORET Jan.—Mai.

INTROD. 1778.

lætus. 11. T. (Mezereon-leav'd) umbella quadri- vel quinquefida: bis dichotoma, involucellis primis oblongis; superioribus rhombeo-subrotundis, foliis lineari-lanceolatis subemarginatis integerrimis. (*Euphorbia læta*) *Willd. sp. pl.* 2. *p.* 907.—*Euphorbia divaricata. Jacq. ic.* 1. *t.* 87.

HABITAT ....

FLORET Jun. Jul.

CULT. 1758.

mellifer us. 12. T. (Honey-bearing) foliis sparsis lanceolatis acutis lævibus, pedunculis dichotomis, capsulis muricatis. (*Euphorbia mellifera*) *Willd. sp. pl.* 2. *p.* 892.—*Bot. magaz.* 1305.—*Hort. kew. ed.* 2. *v.* 3. *p.* 161.

HABITAT in Madeira. G. H. ♄.

Floret Ap. Mai.
Introd. 1784.

T. (Twin-glanded) foliis oppositis minutissimis petiolatis obovatis integerrimis, glandulis duabus geminatis caulinis ad basin petiolorum; caule fruticoso tenui. *biglandulosus.* 13. *

Habitat in insula Bourbon. S. ♄.
Floret Sept.
Introd. ante 1808.
Obs. Ex sicco descriptus.

T. (Petioled) petiolis verticillatis, folio orbiculato longioribus, floribus solitariis, caule fruticoso inermi nudo. *Bot. magaz.* 883.—*Euphorbia petiolaris. Hort. kew. ed.* 2. *v.* 3. *p.* 160. *petiolaris.* 14.

Habitat in Ind. occ. S. ♄.
Floret Sept.
Introd. circa 1800.

T. (Cotinus-leav'd) foliis oppositis subcordatis petiolatis emarginatis integerrimis, caule fruticoso. (*Euphorbia cotinifolia*) *Willd. sp. pl.* 2. *p.* 892.—*Hort. kew. ed.* 2. *v.* 3. *p.* 169.—*Tithymalus arboreus americanus, cotini folio. Comm. hort. amst.* 1. *p.* 29. *t.* 15. *Cotinifolius.* 15.

Habitat in America merid. S. ♄.
Floret Jul. Aug.
Introd. 1690.

*** Annui, *magis foliosi.*

T. (Various-leav'd) inermis, foliis serratis panduræformibus; summis lanceolatis, floribus terminalibus subumbellatis. (*Euphorbia heterophylla*) *Willd. sp. pl.* 2. *p.* 891.—*Hort. kew. ed.* 2. *v.* 3. *p.* 169.—*Tithymalus heterophyllus. Plum. ic.* 250. *t.* 251. *f.* 3. *heterophyllus.* 16.

HABITAT in India occidentali. S. ♄.
FLORET Ap.—Sept.
CULT. 1690.

cyathophorus. 17. T. (Colour'd) inermis, foliis panduræformibus ovatis, floribus terminalibus subumbellatis, involucellis coloratis. *(Euphorbia cyathophora) Willd. sp. pl. 2. p.* 891.
HABITAT in America calidiore. S. ♄.
FLORET Jul. Aug.
INTROD. circa 1806.
OBS. Hunc post heterophyllum indicavi ob affinitatem et inflorescentiam, revera non exacte umbellatum. Distinctum a præcedente *foliis* superioribus nunquam lanceolatis. Variat involucris rubris et albis. *Willd. l. c.*

repandus. 18. * T. (Waved) villosus, foliis altè petiolatis alternis, latè ovatis repando-dentatis, summis oppositis, caule erecto striato subbipedali.
HABITAT in Ind. orient. S. ♂.
FLORET Aug.
INTROD. circa 1808.
OBS. Described from Mr. Vere's choice collection.

nudiflorus. 19. T. (Naked-flower'd) inermis fruticosus, foliis ovatis integerrimis, cyma axillari nuda.—(*Euphorbia nuda*) *Willd. sp. pl.* 2. *p.* 892.
HABITAT in Peru? S. ♄.
FLORET Aug.
INTROD. 1800.
OBS. *Frutex* humanæ altitudinis ramis sæpius trichotomis. *Folia* opposita et terna ovata margine subundulata glabra. *Cymæ* ramosæ in foliorum axillis absque involucris. *Petala* subrotunda tenuissima crenata. *Styli* connati. *Capsulæ* glabræ. *Willd. l. c.*

T. (Plum-leav'd) dichotomus, foliis subovatis serratis acutis subvillosis, caule erecto glabro, floribus in dichotomiis ramorum omnium solitariis, dichotomiis superioribus cymosè approximatis. *Hort. kew. ed.* 2. *v.* 3. *p.* 161. —*Euphorbia prunifolia.* *Prunifolius.* 20.

HABITAT in Peru? H. ⊙. s. S. ♂.
FLORET Jul.—Oct.
INTROD. 1799.

T. (Painted) dichotomus, foliis ovatis hirsutis petiolatis integerrimis, pedunculis axillaribus unifloris, petalis ovatis, capsulis glabris. *(Euphorbia picta) Willd. sp. pl.* 2. *p.* 896. —*Jacq. icones,* 3. *t.* 477.—*Hort. kew. ed.* 2. *v.* 3. *p.* 162. *pictus.* 21.

HABITAT in America meridionali. S. ♃.
FLORET Mai.—Jul.
INTROD. 1780.

GALARHŒUS. *Euphorbia Linn.*

Flores præcipue terminales umbellato-involucrati. *Involucrum* polyphyllum. *Involucellum* diphyllum. *Calyx* 4-5 partitus, laciniis integris supernè rotundatis. *Herbæ lactifluæ,* s. rarissimè suffrutices inermes, *caulibus* teretibus valde foliosis. Cætera Tithymali. Genus recognoscendum.

* GLAUCI, *caulibus perennibus, foliis glaucis numerosis.*

G. (Caper) umbella quadrifida: dichotoma, foliis oppositis decussatis loratis integerrimis glaucis, caule bienni.—*Euphorbia Lathyris. Willd. sp. pl.* 2. *p.* 906.—*Hort. kew. ed.* 2. *v.* 3. *p.* 164.—*Eng. bot. t.* 2255. *Lathyris.* 1.

HABITAT in Gallia, et Italia, et forte in Anglia.
FLORET Mai.—Oct. H. ♂.
CULT. 1597.

Genistoides. 2. G. (Genista-like) umbella quinquefida bifida, involucellis ovatis, foliis linearibus erectis, caule frutescente. *Willd. sp. pl.* 2. *p.* 908.
HABITAT C. B. S. G. H. ♄.
FLORET Jul. Aug.
INTROD. ante 1808.

Paralias. 3. G. (Sea Tithymal) umbella subquinquefida: bifida, involucellis cordato-reniformibus, foliis sursum imbricatis. (*Euphorbia Paralias*) *Willd. sp. pl.* 2. *p.* 912.—*Hort. kew. ed.* 2. *v.* 3. *p.* 166.—*Euphorbia paralia. Eng. bot. t.* 195.
HABITAT in Angliæ maritimis. F. ♃.
FLORET Jul.—Sept.
OBS. Variat.
α. anglicus, minor, pedalis, foliis brevioribus. *Eng. bot.* 195.
β. medius, sesquipedalis, foliis longioribus, paucioribus.
γ. major, 3-4-pedalis, caulibus suffruticosis.—G. H. ♄.—Forte propria species. Unde derivatur nescio.

Nicæensis. 4. G. (Sharp-leav'd) præglaucus; foliis subimbricatis, anguste lanceolatis subcuspidatis, caulibusque erecto-patulis.—*Euphorbia nicæensis. Willd. sp. pl.* 2. *p.* 921.—*Jacq. ic.* 3. *t.* 485.
HABITAT in Hispania, &c. F. ♃.
FLORES non vidi.
INTROD. ante 1809.

myrsinites. 5. G. (Glaucous) umbella suboctofida: bifida, involucellis subovatis, foliis spatulatis patentibus carnosis mucronatis margine scabris.—

(Euphorbia myrsinites.) Willd. sp. pl. 2. p. 921.—Hort. kew. ed. 2. v. 3. p. 169.

Habitat in Italia, Gallia, Hispania. H. ♃.
Floret Ap.—Jun.
Cult. 1570.

G. (Imbricated) umbella dichotoma bifida, in- *imbrica-*
voluc. subrotundis mucronatis, foliis obovatis *tus.*
imbricatis serrulatis, caule fruticuloso. *(Eu-* 6.
phorbia imbricata.) Persoon's synopsis, 2. p. 14 ?—Willd. sp. pl. 2. p. 901.

Habitat in Lusitania. *Petala* integerrima. *Stamina* numerosa. *Filamenta* albida. *Pers. l. c.* G. H. ♄.
Floret Aug. Sept.
Introd. ante 1804.

** Perennes, *virides, foliis numerosis.*

G. (Marsh) umbella multifida: subtrifida: bi- *palustris.*
fida, involucellis ovatis, foliis lanceolatis, ra- 7.
mis sterilibus. *(Euphorbia palustris.) Willd. sp. pl. 2. p. 922.—Hort. kew. ed. 2. v. 3. p. 169.*

Habitat in Germania, Gallia, &c. H. ♃.
Floret Mai.—Aug.
Cult. 1570.

G. (Irish, Makinboy) umbella sexfida: dicho- *hyber-*
toma, involucellis ovalibus, foliis integerri- *nus.*
mis, ramis nullis, capsulis verrucosis. *(Eu-* 8.
phorbia hyberna.) Willd. sp. pl. 2. p. 923. —Hort. kew. ed. 2. v. 3. p. 170.—Eng. bot. t. 1337.

Habitat in Hibernia, Siberia, Austria, &c.
Floret Mai. Jun. H. ♃.

G. (End-nick'd) umbella multifida: bifida, invo- *emargi-*
lucellis late cordatis, foliis oblongis emarginatis *natus.*
glabris, caule ramoso, capsulis subverrucosis. 9.

(Euphorbia emarginata.) Willd. sp. pl. 2. p. 923.—Hort. kew. ed. 2. v. 3. p. 170.
HABITAT in Italia. H. ♃.
FLORET Jul. Aug.
CULT. 1758.

Androsemifolius. 10. * G. (Tutsan-leav'd) nudus, lævis; umbella quinquefida; bifida; foliis sessilibus lanceolatis utrinque venosis. *(Euphorbia Androsemifolia.) Donn. cat. hort. cantab. ed. 6. p. 132.*
HABITAT in Hungaria. H. ♃.
FLORET Jul.—Sept.
INTROD. 1804.

corallioides. 11. G. (Coral-stalk'd) umbella quinquefida: trifida: dichotoma, involucellis ovatis, foliis lanceolatis, capsulis lanatis. *(Euphorbia corallioides.) Willd. sp. pl. 2. p. 917.—Hort. kew. ed. 2. v. 3. p. 168.*
HABITAT in Sicilia, Barbaria, &c. H. ♃.
FLORET Jun.—Aug.
CULT. 1752.
OBS. *Caules* bipedales, corallii colore.
β minor, caulibus gracilioribus rufescentibus.
OBS. I had this variety from the Nurseries as a Greenhouse plant, by the name of Euphorbia nigra.

spathulæfolius. 12. * G. (Spatula-leav'd) umbella quadrifida, bifida, involucellis obovatis; foliis spathulato-lanceolatis integris reflexis, caule suffruticoso, subramoso.
HABITAT .... G. H. ♄.
FLORET Aug.
INTROD. ante 1800.

corollatus. 13. G. (Great-flower'd) umbella quinquefida: trifida: dichotoma, involucellis foliisque oblongis obtusis, petalis membranaceis. *(Euphor-*

bia corollata.) *Willd. sp. pl.* 2. *p.* 916.—*Hort. kew. ed.* 2. *v.* 3. *p.* 167.—*Tithymalus marianus. Pluk. mant.* 182. *t.* 446. *f.* 3.
HABITAT in America septentrionali. H. ♃.
FLORET Jul.—Sept.
INTROD. 1803.

G. (Sweet) umbella quinquefida: bifida: involucellis subovatis denticulatis, foliis lanceolatis obtusis apice denticulatis, capsulis verrucosis pilosis. *(Euphorbia dulcis.)* *Willd. sp. pl.* 2. *p.* 909.—*Hort. kew. ed.* 2. *v.* 3. *p.* 165. *dulcis.* 14.
HABITAT in Europa australi. H. ♃.
FLORET Mai. Jun.
CULT. 1759.

G. (Broad-leav'd) umbella quinquefida: bifida, involucellis ovatis denticulatis, foliis integerrimis lanceolatis obtusis retusis subtus villosis, capsulis papilloso-hispidis. *(Euphorbia epithymoides.)* *Willd. sp. pl.* 2. *p.* 909.—*Hort. kew. ed.* 2. *v.* 3. *p.* 165. *epithymoides.* 15.
HABITAT in Austria. H. ♃.
FLORET Mai. Jun.
CULT. 1805.

G. (Juniper-leav'd) umbella quinquefida: bifida, involucellis ovatis mucronatis, foliis lanceolatis: infimis involutis retrorsum imbricatis. *(Euphorbia Pithyusa.)* *Willd. sp. pl.* 2. *p.* 911.—*Hort. kew. ed.* 2. *v.* 3. *p.* 165.—*Pithyusa. Dalechamp. hist.* 1652. *Pithyusa.* 16.
HABITAT in Europa australi. F. ♄.
FLORET Jun. Jul.
CULT. 1741.

Salicifo- G. (Willow-leav'd) umbella multifida: dicho-
lius. toma, involucellis reniformi-cordatis, foliis
17. lanceolatis villosis. (*Euphorbia salicifolia.*)
Willd. sp. pl. 2. *p.* 923.

Habitat ad sylvarum margines *Hungariæ.*
Floret Mai. Jun. H. ♃.
Introd. 1804.

pilosus. G. (Hairy) umbella quinquefida: trifida; bifi-
18. da, involucellis ovatis, petalis integris, foliis
lanceolatis subpilosis apice serrulatis. (*Eu-
phorbia pilosa.*) *Willd. sp. pl.* 2. *p.* 917.—
Hort. kew. ed. 2. *v.* 3. *p.* 168.

Habitat in Siberia. H. ♃.
Floret Mai.—Aug.
Cult. 1758.

carnioli- G. (Carniolian) umbella quinquefida: bifida,
cus. radiis nutantibus, involucellis ovatis integer-
19. rimis, foliis lanceolatis acutis integerrimis,
capsulis glabris verrucosis. (*Euphorbia car-
niolica.*) *Willd. sp. pl.* 2. *p.* 910.

Habitat in Carniola. H. ♃.
Floret Aug.
Cult. ante 1795.

verruco- G. (Warted) umbella quinquefida: bifida, in-
sus. volucellis ovatis, foliis lanceolatis serrulatis
20. villosis, capsulis verrucosis. (*Euphorbia ver-
rucosa.*) *Willd. sp. pl.* 2. *p.* 915.

Habitat in Gallia, Helvetia, &c. H. ♃.
Floret Jun.
Introd. ante 1800.
Obs. Vidi crescentem regio horto Kewense.

orienta- G. (Oriental) umbella quinquefida: quadrifida:
lis. dichotoma, involucellis subrotundis acutis,
21. foliis lanceolatis. (*Euphorbia orientalis.*)

Willd. sp. pl. 2. *p.* 917.—*Hort. kew. ed.* 2. *v.* 3. *p.* 168.
HABITAT in Oriente. H. ♃.
FLORET Jun. Jul.
CULT. 1739.

G. (Pear-rooted) umbella quinquefida: bifida, involucellis reniformibus: primis obcordatis. (*Euphorbia Apios.*) *Willd. sp. pl.* 2. 907. —*Hort. kew. ed.* 2. *v.* 3. *p.* 164. *Apios.* 22.
HABITAT in Candia. H. ♃.
FLORET Jun. Jul.
CULT. 1596.

G. (Narrow notch-leav'd) umbella quinquefida: trifida: dichotoma, involucellis diphyllis reniformibus, foliis amplexicaulibus cordatis serratis. (*Euphorbia serrata.*) *Willd. sp. pl.* 2. *p.* 915.—*Hort. kew. ed.* 2. *v.* 3. *p.* 167. —*Jacq. ic.* 3. *t.* 483. *serratus.* 23.
HABITAT in Europa australi. H. ♃.
FLORET Jul.
CULT. 1710.

G. (Cretan hoary) umbella multifida, bifida, involucellis orbiculatis, foliis lineari-lanceolatis villosis. (*Euphorbia cretica.*) *Mill. dict. ed.* 8. *no.* 28.—*Tithymalus creticus characias, angustifolius, villosus et incanus. Tournef. cor.* 1. *creticus.* 24. †
HABITAT in Oriente, Hispania, atque Lusitania. *Mill. l. c.* H. ♃?
FLORET ....
CULT. ante 1768.

G. (Spinous) umbella subquinquefida simplici, involucellis ovatis: primariis trifariis, foliis oblongis integerrimis, caule fruticoso. (*Eu- spinosus.* 25.

phorbia spinosa.) *Willd. sp. pl.* 2. *p.* 908.—*Hort. kew. ed.* 2. *v.* 3. *p.* 165.

HABITAT in Oriente. F. ♃.

FLORET Mai.—Sept.

CULT. 1710.

Linifolius. 26. G. (Flax-leav'd) fruticosus, inermis; foliis sparsis, lanceolatis, mucrone innocuo terminatis; terminalibus ternis. *(Euphorbia Linifolia.)* *Jacq. hort. vindob.* 1. 86.—*Euphorbia linarifolia. Willd. sp. pl.* 2. *p.* 893.

HABITAT .... ♄.

FLORET ....

CULT. circa 1794.

rigidus. 27. * G. (Rigid) ramulis filiformibus, foliis numerosis lineari-oblongis subretusis, costâ subtus conspicuâ mucronulo finiente, floribus subsolitariis terminalibus.

HABITAT .... H. ♄.

FLORET Jul. Aug.

CULT. circa 1795.

OBS. *Fruticulus* affinis G. spinoso, rigidus absque pubescente, ut folia viridia semuncialia erecta sive patula internodiis triplo longiora, *Ramuli* minutim undulati cortice fulvo-fusco subruguloso. *Involucra* nulla nisi folia suprema. *Pedunculi* horizontales bilineares. *Petala* rotundata. Descriptio ex exemplo parvo sicco.

Junceus. 28. G. (Rushy) umbella quinquefida: dichotoma, foliis involucrisque lineari-lanceolatis acutis, involucellis ovato-oblongis acuminatis. *(Euphorbia juncea.)* *Willd. sp. pl.* 2. *p.* 913.—*Hort. kew. ed.* 2. *v.* 3. *p.* 166.—*Jacq. hort. schœnbr.* 1. *t.* 107.

HABITAT in Porto Santo juxta Madeiram.
FLORET Jul. G. H. ♃.
INTROD. 1779.

G. (Aleppo) umbella quinquefida: dichotoma, involucellis ovato-lanceolatis mucronatis, foliis inferioribus setaceis. *(Euphorbia aleppica) Willd. sp. pl. 2. p. 913. Hort. kew. ed. 2. v. 3. p. 166.—Mill. dict. ed. 8.* *aleppicus.* 29.
HABITAT in Creta atque Aleppo. F. ♃.
FLORET Jul. Aug.
CULT. 1739.

*** ANNUI.

G. (Letter'd) umbella quinquefida: trifida: dichotoma, involucellis lanceolatis, foliis lanceolatis denticulatis pubescentibus, capsulis glabris verrucosis. *(Euphorbia literata) Willd. sp. pl. 2. p. 919.—Hort. kew. ed. 2. v. 3. p. 169.—Jacq. ic. 3. t. 482.* *literatus.* 30.
HABITAT .... H. ⊙.
FLORET Aug.
INTROD. 1790.

G. (Annual Warted) umbella quinquefida: trifida: dichotoma, involucris carina pilosis, foliis serratis lanceolatis, capsulis verrucosis. *(Euphorbia platyphyllos) Willd. sp. pl. 2. p. 918.—Hort. kew. ed. 2. v. 3. p. 168.* *platyphyllus.* 31.
HABITAT in Anglia. H. ⊙.
FLORET Jul. Aug.

G. (Upright) umbella quadri-quinquefida, trifida, bifida, involucellis fere ovatis. Foliis lanceolatis, serratis, basi integris, lævibus. Capsulis verrucosis absque pilis. *(Euphorbia* *strictus.* 32.

stricta) Eng. bot. 333.—*Euphorbia platyphyllos* β. *Hort. kew. ed.* 2. *v.* 3. *p.* 168.

HABITAT in Anglia, prope Eversden Wood com. Cantab. H. ⊙.

FLORET Aug.

OBS. I have once seen this growing in the Cambridge Botanic Garden, and also possess a wild specimen of it from the worthy Curator. It appears to be a far smaller plant than G. platyphyllus.

helioscopius. 33. G. (Sun Spurge) umbella quinquefida: bifida: dichotoma, involucellis obovatis, foliis cuneiformibus serratis glabris, capsulis lævibus. *(Euphorbia helioscopia) Willd. sp. pl.* 2. *p.* 914.—*Hort. kew. ed.* 2. *v.* 3. *p.* 167.—*Eng. bot.* 883.

HABITAT in Anglia. H. ⊙.

FLORET Jul.—Sept.

micranthus. 34. G. (Small-flower'd) umbella trifida: dichotoma, foliis lanceolato obovatis serratis, involucellis cordatis, petalis integris, capsulis verrucosis. *(Euphorbia micrantha) Willd. sp. pl.* 2. *p.* 905.—*Hort. kew. ed.* 2. *v.* 3. *p.* 164.

HABITAT in Persia boreali. H. ⊙.

FLORET Jul. Aug.

INTROD. 1803.

OBS. *Caulis* teres simplicissimus pedalis glaber. *Folia* alterna obovato-lanceolata acuta glabra argute serrata. *Umbella* trifida dichotoma. *Involucrum* triphyllum ut folia caulina. *Involucella* cordata mucronata serrata. *Flores* parvi. Petala integra. Capsula punctis elevatis obsita. *Willd. l. c.*

ESULA. *Euphorbia linn.* &c.

Involucrum polyphyllum. *Involucella* diphylla. *Calyx* 4-5-partitus, laciniis cerinis bicornibus, vel lunatis. Cætera ut in Galarhœo. Genus recognoscendum.

* SUFFRUTESCENTES, *ramis suffrutescentibus (nec annuis) ; radicibus non repentibus. Petalis lunatis, sublunatisve.*

E? (Tree-like) umbella multifida; dichotoma, involucellis subcordatis: primariis triphyllis, caule arboreo. *(Euphorbia dendroides) Willd. sp. pl.* 2. *p.* 924.—*Mill. dict. ed.* 8. *no.* 20. *dendroides.* 1. †

HABITAT in Italia, &c. H. ♄.
FLORET ....
INTROD. ante 1768.

E? (Upright-red) umbella multifida: bifida, involucellis perfoliatis emarginatis, foliis lanceolatis integerrimis, caule frutescente. *(Euphorbia Characias) Willd. sp. pl.* 2. *p.* 925. —*Mill. dict. ed.* 8. *no.* 24.—*Hort. kew. ed.* 2. *v.* 3. *p.* 170.—*Eng. bot. t.* 442. *Characias.* 2.

HABITAT in Gallia, Anglia, &c. S. ♄.
FLORET Aug. Sept.

E. (Wood) umbella quinquefida: bifida, involucellis perfoliatis subcordatis acutiusculis, foliis lanceolatis integerrimis. *(Euphorbia sylvatica) Willd. sp. pl.* 2. *p.* 924.—*Mill. dict. ed.* 8. *no.* 29. *sylvatica.* 3.

HABITAT in Europa australiori.
FLORET Jul.—Sept. H. ♄. s. G. H. ♄.
CULT. ante 1768.

OBS. *Caules* fruticosi, proliferi, crassi. *Folia* pilosa, perennia. *Petala* lunata, erosa. (E. Characiæ vero integra) *Willd. l. c.*

Amygdaloides. 4. E. (Almond-like) umbella multifida: dichotoma, involucellis perfoliatis orbiculatis, foliis obtusis. *(Euphorbia Amygdaloides) Willd. sp. pl.* 2. *p.* 924.—*Hort. kew. ed.* 2. *v.* 3. *p.* 170.—*Eng. bot. t.* 256 —*Mill. dict. ed.* 8. *no.* 21.

Habitat in Angliæ sylvaticis. H. ♃. ♄.
Floret Mar.—Jul.

Obs. *Folia* alterna, remota, tenuia (non coriacea rigida). *Caulis* herbaceus nec lignosus. *Umbellæ* etiam laterales. *Willd. l. c.*

β. foliis elegantissimè variegatis. G. H. s. F. ♄.

portlandica. 5. E? (Portland) umbella quinquefida: dichotoma, involucellis subcordatis concavis, foliis lineari-lanceolatis acutis glabris patentibus. *(Euphorbia portlandica) Willd. sp. pl.* 2. *p.* 911.—*Hort. kew. ed.* 2. *v.* 3. *p.* 166.—*Eng. bot. t.* 441.

Habitat in Anglia, com. Devoniense. H. ♄.
Floret Mai.—Nov.

Obs. *Caules* fruticulosi, palmares, glabri, teretes, hyeme rubri. *Folia* alterna, subsessilia, lineari-lanceolata, mucronata, glabra, patentia, basi subtus rubra. *Ramuli* laterales: ex alis inferioribus steriles, demum excrescentes et caulem inumbrantes. *Umbellæ* terminales, quinquefidæ, dichotomæ, patentes. *Involucrum* foliis simile. *Involucella* subcordata, concava, mucronata. *Flores* subsessiles lutei. Primi et secundi masculi: Petalis muticis obtusissimis; Reliqui hermaphroditi: Petalis bicornibus. *Fructus* glabri angulis muricatis. *Willd. l. c.*

** PÉRENNES, *radicibus repentibus, ramis sterilibus annuis, foliis sæpe angustissimis, numerosissimis ; petalis bicornibus luteis.*

E. (Dalechamp's) umbella multifida: bifida, involucellis subcordatis, petalis subbicornibus, ramis sterilibus, foliis uniformibus. *(Euphorbia Esula) Willd. sp. pl.* 2. *p.* 919.—*Hort. kew. ed.* 2. *v.* 3. *p.* 169.—*E. inermis, foliis lanceolato-linearibus involucri universalis foliis quinis ovato-acutis, partialis semiorbiculatis. Linn. hort. ups.* 141 —*Sauv. monsp.* 47.—*Esula. Riv. tetr.* 227.—*Esula minor. Dalech. hist.* 1653.—*Dod. pempt.* 374. *Dalechampii.* 6.

HABITAT in Germania, Belgio, Gallia, Helvetia, Carniola, Britannia. H. ♃.

FLORET Jul.

E. (Cypress) umbella multifida: dichotoma, involucellis subcordatis, ramis sterilibus, foliis setaceis, caulinis lanceolatis. *(Euphorbia Cyparissias) Willd. sp. pl.* 2. *p.* 920.—*Hort. kew. ed.* 2. *v.* 3. *p.* 169.—*Eng. bot. t.* 840. *Cyparissias.* 7.

HABITAT in Germania, Bohemia, Helvetia, Gallia, Britannia. H. ♃.

FLORET Jul.

E. (Twiggy) umbella multifida: bifida; involucellis subtriangularibus; petalis bicornibus; foliis sessilibus erectis, superioribus latioribus; capsulis scabris.—*Walst. et kit. fl. hung. tab.* 162. *(Euphorbia virgata.)* *virgata.* 8.

HABITAT in Hungaria. H. ♃.

FLORET Jul.

INTROD. 1807. *Donn. hort. cant. ed.* 6.

OBS. Euphorbia virgata Persoonii longissimè differt, habitu, characteribus specificis, atque genericis.

multicorymbosa. 9. * E. (Many-flower'd) umbella multifida: dichotoma, involucellis semiorbiculato-cordatis, ramis sterilibus numerosis, foliis lineari-lanceolatis obtusis, infimis deorsum valde attenuatis; involucri ovato-oblongis.—*Euphorbia multicorymbosa. Hortorum.*

HABITAT .... H. ♃.

FLORET Jul.

CULT. ante 1805.

angustifolia. 10. * E. (Narrow-leav'd) umbella multifida conferta involucellis subcordatis, foliis numerosissimis confertis biuncialibus effusis anguste linearibus.

HABITAT .... H. ♃.

FLORET Jul.

CULT. circa 1780.

biumbellata. 11. E. (Double-umbell'd) umbella multifida duplici, involucellis subcordatis, foliis linearibus.

HABITAT in Barbaria, Monspelii. *Poir. it. ed. germ. t. 1.—Persoon. synops. 1. p. 17.—(Euphorbia biumbellata.)* H. ♃.

FLORET Aug.

CULT. ante 1780.

*** ANNUÆ.

segetalis. 12. E. (Corn) umbella quinquefida: dichotoma, involucellis cordatis acutis, foliis lineari-lanceolatis: superioribus latioribus. *(Euphorbia segetalis) Willd. sp. pl. 2. p. 913.—Hort. kew. ed. 2. v. 3. p. 166.—Jacq. austr. 5. p. 25. t. 450.*

HABITAT in Europa australi. H. ⊙.

FLORET Jul. Aug.

CULT. 1699.

E. (Linear-leav'd) umbella quinquefida: bifida, involucellis cordatis mucronatis, foliis oblongis. (*Euphorbia provincialis*) *Willd. sp. pl.* 2. *p.* 914. *provincialis.* 13.
HABITAT in Europa australi. H. ⊙.
FLORET Aug.—Nov.
INTROD. 1800.

E. (Rush-like) umbella quinquefida, bis bifida, involucellis semiorbiculato-cordatis, submucronatis, foliis linearibus semuncialibus retroimbricatis, supremis involucrisque latè ovatis, *Juncoides.* 14. *
HABITAT .... S. ⊙.
FLORET Jul.
INTROD. circa 1800.
OBS. I have a dry specimen of this from Chelsea Physic Garden by the name of Euphorbia Juncoides, where it is considered as distinct from the preceding, which it too much resembles; but appears to be many times smaller, and with narrower leaves. It will probably prove the same as the apparently narrower leaved Tithymalus Junceus above, which I only know from having once seen Jacquin's figure of it, and do not remember its generic characters.

E. (Spanish) umbella quadrifida, trifida, involucellis ovatis acutis, foliis lanceolatis, inferioribus spathulatis. *valentina.* 15.
HABITAT in R. Valentino in Hispania. *Capsula* purpurascens lævis. *Pers. synops.* 1. *p.* 15. (*Euphorbia valentina.*)
FLORET Jul.
INTROD. 1804. H. ⊙.

exigua. 16. E. (Dwarf) umbella trifida: dichotoma, involucellis lanceolatis, foliis linearibus. *(Euphorbia exigua) Willd. sp. pl.* 2. *p.* 903.—*Hort. kew. ed.* 2. *v.* 3. *p.* 164.—*Curt. fl. lond. cum ic.*—*Eng. bot. t.* 1336.

HABITAT in cultis prope Londinum, atque in com. Ebor. prope Cottingham, at rarius. H. ⊙.

FLORET Jul. Aug.

diffusa. 17. E. (Diffuse) umbella quadrifida: dichotoma, involucellis obtusis, foliis alternis, lineari-cuneiformibus emarginatis mucronatis, caule ramoso diffuso. *(Euphorbia diffusa) Willd. sp. pl.* 2. *p.* 907.

HABITAT in Austriæ arvis. H. ⊙.

FLORET Jul. Aug.

INTROD. 1798.

Valde affinis E. exiguæ β retusæ, sed excepto numero variante radiorum umbellæ distincta involucellis obtusis; a præcedente (E. terracina) magnitudine, foliis glabris et habitu diversa. *Willd. l. c.*

Peplus. 18. E. (Petty) umbella trifida: dichotoma, involucellis ovatis, foliis integerrimis obovatis petiolatis. *(Euphorbia Peplus) Willd. sp. pl.* 2. *p.* 903.—*Hort. kew. ed.* 2. *v.* 3. *p.* 163.—*Fl. lond. cum ic.*—*Eng. bot. t.* 959.

HABITAT in cultis Angliæ vulgatissima. H. ⊙.

FLORET Jul.—Jan.

minima. 19. * E. (Least) umbella trifida dichotoma, involucellis latè obovatis, foliis integerrimis obovato-spathulatis, altè petiolatis, ramis longis simplicibus. *Euphorbia β. Peplis minor. Willd. sp. pl.* 2. *p.* 903. *et Bauh. hist.* 3. *p.* 670.

HABITAT .... H. ⊙.
FLORET Jul.—Sept.
CULT. circa 1800.
OBS. Præcedentis fere altitudo, at gracilior, foliis fere triplo minoribus magisque obtusis. A semine non variat.

E. (Falcated) umbella trifida: dichotoma, involucellis subcordatis mucronatis, foliis lanceolatis obtusiusculis. *Willd. sp. pl.* 2. *p.* 903. —*(Euphorbia falcata) Hort. kew. ed.* 2. *v.* 3. *p.* 163.—*Pithyusa minor subrotundis et acutis foliis. Barrel. icon.* 751.—*Tithymalus Esula exigua chalepensis ramosior foliis latioribus lintriformibus. Moris. hist.* 3. *p.* 339. *n.* 7. *falcata.* 20.
HABITAT in Europa australi. H. ⊙.
FLORET Jun.—Aug.
CULT. ante 1699.

ANISOPHYLLUM. *Euphorbia Linn.*

Involucrum nullum. *Calyx* 4-5-partitus, laciniis integris supernè rotundatis.—*Herbæ* annuæ, dichotomæ foliosæ, sæpe prostratæ. *Flores* præcipue axillares sparsi, seu aggregati, rarius solitarii.—*Folia* plus minus basi inæqualia Begoniarum modo. Cætera, Esulæ, at absque involucris, involucellisque.

* *Foliis uno latere basi obliquè inæqualissimis; floribus solitariis.*—CHAMÆSYCE Antiquorum.

A. (Purple) dichotomum, foliis integerrimis semicordatis, floribus solitariis axillaribus, caulibus procumbentibus. (*Euphorbia Peplis*) *Willd. sp. pl.* 2. *p.* 899.—*Hort. kew. ed.* 2. *v.* 3. *p.* 163.—*Eng. bot.* 2002. *Peplis.* 1.

HABITAT in Angliæ maritimis Devoniensibus.
FLORET Jul. Aug. H. ⊙.

Chamæsyce. 2. A. (Scollop-leav'd) dichotomum, foliis crenulatis subrotundis (semicordatis) glabris, floribus solitariis axillaribus, caulibus procumbentibus. (*Euphorbia Chamæsyce*) *Willd. sp. pl.* 2. *p.* 899.—*Hort. kew. ed.* 2. *v.* 3. *p.* 163.
HABITAT in Europa australi, atque Siberia.
FLORET Jul. Aug. H. ⊙.
CULT. 1752.

** *Foliis minus inæqualibus; floribus plus minus aggregatis.*

Polygonifolium. 3. A. (Knot-grass-leav'd) foliis oppositis integerrimis lanceolatis obtusis, floribus solitariis axillaribus, caulibus procumbentibus. (*Euphorbia polygonifolia*) *Willd. sp. pl.* 2. *p.* 900.—*Hort. kew. ed.* 2. *v.* 3. *p.* 163.—*Jacq. collectan. suppl.* 114. *t.* 13. *f.* 3.
HABITAT in America boreali. H. ⊙.
FLORET Jun. Jul.
INTROD. ante 1704.

Thymifolium. 4. A. (Thyme leav'd) dichotomum, foliis serratis ovali-oblongis, capitulis axillaribus glomeratis subsessilibus, caulibus procumbentibus. (*Euphorbia thymifolia*) *Willd. sp. pl.* 2. *p.* 898.—*Hort. kew. ed.* 2. *v.* 3. *p.* 162.—*Pluk. alm.* 372. *t.* 113. *f.* 2.
HABITAT in India. S. ⊙.
FLORET Jul. Aug.
CULT. ante 1699.

Humboldtii. 5. * A? (Humboldt's) erectum, ramis alternis, subdichotomis filiformibus sulcatis, foliis alternis oppositisque longè petiolatis cuneato-ovatis

supra margineque pubescentibus; pedunculis terminalibus bracteatis.—*Euphorbia Humboldtii. Donn. hort. cant. ed.* 6. *p.* 132.

HABITAT (in America calidiore?) S. ♂.
FLORET Jul.—Oct.
INTROD. 1809, ex Gallia.
OBS. Communicavit Dom. Donn, siccatum. *Herba* gracillima subdodrantalis, radice subbienni, fibris lateralibus paucioribus. *Folia* magna ratione ramorum pilosorum, et subinde uncialia. *Bracteæ* lineares pilosæ. *Flores* minutissimi, albicantes. *Capsulæ* minutæ læves. *Semina* ratione capsularum magna subrotundato-conica rugosula.—Descriptio ex sicc.—Fortè Tithymali species, ob foliorum formam.

A. (Hyssop-leav'd) dichotomum, foliis subcrenatis linearibus, floribus fasciculatis terminalibus, caule erecto. (*Euphorbia hyssopifolia*) *Willd. sp. pl.* 2. *p.* 897.—*Hort. kew. ed.* 2. *v.* 3. *p.* 162. — *Hyssopifolium.* 6.

HABITAT in America meridionali. S. ⊙.
FLORET Aug. Sept.
INTROD. 1787.

A. (St. John's-wort-leav'd) dichotomum, foliis serratis ovali-oblongis glabris, corymbis terminalibus, ramis divaricatis. (*Euphorbia hypericifolia*) *Willd. sp. pl.* 2. *p.* 895.—*Hort. kew. ed.* 2. *v.* 3. *p.* 161. — *Hypericifolium.* 7.

HABITAT in India occidentali. S. ⊙.
FLORET Jun.—Sept.
CULT. 1727.

A. (Basil-leav'd) inerme herbaceum ramosum, foliis subcordatis integerrimis petiolo brevioribus, floribus solitariis. (*Euphorbia ocymoidea*) — *Ocymoideum.* 8.

Willd. sp. pl. 2. *p.* 894.—*Hort. kew. ed.* 2. *v.* 3. *p.* 161.
HABITAT in America meridionali. S. ⊙.
FLORET Jun.—Aug.
INTROD. ante 1733.

dentatum. 9. A. (Dentated) hirsutum pumilum, foliis oppositis ovalibus dentatis, floribus ad summitates congestis. *(Euphorbia dentata) Pers. synops.* 2. 13.—*Mich. fl.* 1. *p.* 211.
HABITAT in America boreali ad Tanassé, circa Nashville. *Folia* superiora maculata. *l. c.*
FLORET Jun. Jul. H. ♂.
INTROD. 1806.

piluliferum. 10. A. (Pill-bearing) dichotomum, foliis serratis ovali-oblongis, pedunculis bicapitatis axillaribus, caule erecto. *(Euphorbia pilulifera) Willd. sp. pl.* 2. *p.* 897.—*Tithymalus botryoides erectus, florum capitulis conjugatis, et longiore pediculo insidentibus. Burm. zeylanic.* 224. *t.* 105. *f.* 1.—*Petiv. gazo. t.* 80. *f.* 14.
HABITAT in India orientali. S. ⊙.
FLORET Aug. Sept.
INTROD. 1800.
OBS. *Caulis* hirtus, *folia* hirtula, elliptico-lanceolata serrulata rufescentia, (lateribus basi valde inæqualibus) subinde subtrapezoidea.

maculatum. 11. † A. (Maculated) dichotomum, foliis serratis oblongis pilosis, floribus axillaribus solitariis, ramis patulis. *(Euphorbia maculata) Willd. sp. pl.* 2. *p.* 896.—*Hort. kew. ed.* 2. *v.* 3. *p.* 162.—*Jacq. hort. vindob.* 2. *p.* 87. *t.* 186.
HABITAT in America calidiore. H. ⊙.
FLORET Jul.
CULT. ante 1660.

A. (Prostrate) dichotomum, foliis ovalibus obsolete serratis, pedunculis axillaribus subtrifloris, caulibus diffusis glabris. *Hort. kew. ed.* 1. *v.* 2. *p.* 139.—*(Euphorbia prostrata) Hort. kew. ed.* 2. *v.* 3. *p.* 161.—*Willd. sp. pl.* 2. *p.* 895. *prostratum.* 12. †

Habitat in India orientali. S. ☉.
Floret Jul. Aug.
Cult. 1758.

Caules herbacei spithamæi procumbentes teretes ramosi rubicundi. *Folia* opposita brevissime petiolata obtusiuscula glabra obsolete trinervia, supra viridia, subtus glaucescentia trilinearia. *Flores* axillares breviter pedicellati sæpe terni, interdum solitarii. *Petala* purpurea. *Hort. kew. l. c.*

A. (Rosy) dichotomum diffusum, foliis obovatis obliquis basi subcordatis apice denticulatis, pedunculis unifloris axillaribus. *(Euphorbia rosea) Willd. sp. pl.* 2. *p.* 895. *roseum.* 13.

Habitat in Japonia. S. ☉.
Floret Aug.
Cult. 1808.

Variat valde magnitudine. *Folia* avenia inferiora latiora et majora. *Flores* axillares in ramorum apice. *Calyx* purpureus. *Petala* lineari-obovata obtusa rosea. *Germen* papillis minutissimis obsitum. *Capsula* junior etiam papillosa, adulta vero glabra. *Willd. l. c.*

Obs. Planta parva ramosa procumbens rubescens nuda. *Folia* opposita trilinearia semi-rotundato-cordata obsoletissime crenulata, brevissime petiolata. *Flores* axillares, terminalesque solitarii, (vel supernè 2-3-nati) subpedunculati. *Capsulæ* læviusculæ. Forte præcedenti

nimis affine. Communicavit Dom. Gul. Anderson.

Ipecacuanha. 14. † A? (Ipecacuanha) dichotomum, foliis integerrimis lanceolatis, pedunculis axillaribus unifloris folia æquantibus, caule erecto. *(Euphorbia Ipecacuanha) Linn.—Pers. synops.* 2. *p.* 15.

HABITAT in Amer. boreal. sabulosis. H. ♃.

FLORET ....

INTROD. Feb. 1812.

OBS. Pedunculi longi. Ab incolis ut vomitorium adhibetur. *Pers. l. c.* Non vidi. Forte alii Generis. Crescit in horto Dom. Vere.

DODECAGYNIA.

SEMPERVIVUM. (Houseleek.) *Gen. pl.* 837.

Calyx 12-partitus. *Petala* 12. *Capsulæ* 12, polyspermæ.

* FRUTESCENTIA. GRANDIFOLIA. *Caule frutescente suffrutescenteve, vel cum radice rarissimè bienni; foliis spathulatis magnis.*

arboreum. 1. S. (Tree) caule arborescente lævi ramoso, foliis cuneiformibus glabriusculis ciliatis: ciliis patulis mollibus. *Willd. sp. pl.* 2. *p.* 930.—*Hort. kew. ed.* 2. *v.* 3. *p.* 171.—*Plant. grass. cum icone.*

HABITAT in Lusitania, et Oriente. G. H. ♄.

FLORET Aug.—Mar.

CULT. 1640.

β. Foliis eleganter variegatis: (Striped Tree-Houseleek.)

OBS. This is a beautiful variety when kept in the Greenhouse in winter; but when it is ne-

cessary to place it in the open air in summer, it so nearly loses its elegant variegation that gardeners sometimes suppose there are two, or more varieties. Replaced in the house it speedily resumes it; and is indeed one of the greatest ornaments a greenhouse can possess; very far excelling the plant in its customary green state.

Miller gives the following account of its origin. "There is a variety with variegated leaves, which is much esteemed by the curious: this was obtained by a branch which had been accidentally broken from a plant of the plain kind at Badmington, the seat of His Grace the Duke of Beaufort, which, after having laid some time, was planted, and when the young leaves pushed out, they were variegated." *Mill. dict. l. c.*

S. (Canary) caule frutescente, foliis orbiculato-spathulatis villosis, nectariis subquadratis truncatis. *Willd. sp. pl.* 2. *p.* 931.—*Hort. kew. ed.* 2. *v.* 3. *p.* 171.—*Plant. grass. cum icone.* *canariense.* 2.

HABITAT in Canariis. G. H. ♂.

FLORET Jun. Jul.

CULT. 1699.

OBS. *Petala* 9. *Stamina* 18. *Pistilla* 9.—*Hort. kew. ed.* 1. *v.* 2. *p.* 147.

This forms by far the largest heads of leaves of any in the genus.

S. (Glutinous) caule frutescente, foliis cuneiformibus viscidis ciliatis: ciliis cartilagineis adpressis. *Willd. sp. pl.* 2. *p.* 931.—*Hort. kew. ed.* 2. *v.* 3. *p.* 172. *glutinosum.* 3.

HABITAT in Madeira. G. H. ♄.

FLORET Jul. Aug.
INTROD. 1777.

** SUFFRUTESCENTIA. PARVIFOLIA. *Caule suffrutescente, vel rarissimè bienni, seu annuo; foliis spathulatis minoribus.*

glandulosum. 4. S. (Glandular) caule frutescente, foliis orbiculato-spathulatis margine glutinosis, glandulis globosis, nectariis cuneiformibus truncatis. *Willd. sp. pl.* 2. *p.* 931.—*Hort. kew. ed.* 2. *v.* 3. *p.* 172.
HABITAT in Madeira. G. H. ♄.
FLORET Mar.—Aug.
INTROD. 1777.

villosum. 5. S. (Villous) foliis spathulato-cuneiformibus obtusis villosis, nectariis palmatis: lacinulis subulatis. *Willd. sp. pl.* 2. *p.* 933.—*Hort. kew. ed.* 2. *v.* 3. *p.* 172.
HABITAT in Madeira. G. H. ♄.
FLORET Jun. Jul.
INTROD. 1777.

tortuosum. 6. S. (Twisted) foliis obovatis subtus gibbis villosis, nectariis bilobis. *Willd. sp. pl.* 2. *p.* 933.—*Hort. kew. ed.* 2. *v.* 3. *p.* 173.—*Curt. bot. magaz.* 296.
HABITAT in Canariis. G. H. ♄.
FLORET Jul.—Oct.
INTROD. 1779.

stellatum. 7. S. (Starry) caule herbaceo pubescente, foliis spathulatis sparsis. *Smith in linn. soc. lond. trans. v.* 1. *p.* 251.—*Persoon. synops.* 2. *p.* 20.
HABITAT in Monte Baldo, rupibus. S. ⊙.
FLORET Jul. Aug.
CULT. ante 1790.
This whole plant is, as it were, a representation

in miniature of Sempervivum arboreum, but more lax and diffuse. It is abundantly distinguished from that species by its annual root, herbaceous pubescent stem, and spreading panicle. The flowers are yellow, and agree perfectly with the generic character of Sempervivum, not with that of Sedum. *Smith. l. c.*

Obs. The resemblance this little annual bears to Sempervivum arboreum, is infinitely less than the above paragraph supposes; but it very closely approaches S. villosum; yet is quite a distinct species.

*** Acaulia: *perennia: scapigera: foliis radicalibus multifariis expansis imbricatis, plerumque ciliatis.*

S. (Common) foliis ciliatis, propaginibus patulis, floribus dodecandris dodecagynis, nectariis cuneiformibus carunculatis. *Willd. sp. pl. 2. p. 932.—Hort. kew. ed. 2. v. 3. p. 172. Curt. lond. cum icone.—Eng. bot. t. 1320.—Plant. grass. cum icone.* — *tectorum.* 8.

Habitat in Europæ rupibus, at vix in Britannia. H. ♃.

Floret Jul.—Sept.

Cult. ....

S. (African) foliorum marginibus serrato-dentatis, propaginibus patulis. *Mill. dict. ed. 8. no. 7.—Sedum afrum montanum, foliis subrotundis, dentibus albis serratis confertim natis. Boerh. index alter. 1. p. 286.* — *africanum.* 9. †

Habitat C. B. S. G. H. ♃.

Floret ....

Cult. ante 1768.

"This sort grows naturally at the Cape of Good Hope: it is a very low plant, whose heads

spread close upon the ground; they are much smaller than those of the common Houseleek. The leaves have white edges, which are indented like the teeth of a saw; they spread open flat; the flowers are produced in loose panicles upon naked footstalks; they are small and white, so make but little appearance.

"This is propagated by offsets, which are put out in plenty from the sides of the heads; this must be planted in pots, sheltered from the frost in winter, and in summer placed in the open air with other hardy succulent plants."

Obs. I have never seen this plant, but taken the above account of it from the eighth edition of Miller's celebrated Dictionary; and had he not likewise therein enumerated Cotyledon serrata, should have almost supposed he had meant that plant by the above description.

hirtum. 10. † S. (Hairy) foliis caule petalorumque apicibus hirtis. *Linn. amœn. academ. v. 4. p. 273.—Willd. sp. pl. 2. p. 934.—Pers. synops. 2. p. 22.—Donn. hort. cantab. ed. 3, 4, 5, & 6.—Sempervivum petalis fimbriatis sobole patula. Schmidt. ic. p. 63. t. 17.*

Habitat in Tauro Rastadiensi. H. ♃.

Floret Jun. Jul.

Cult. ante 1804. *Donn. l. c.*

"Folia radicalia acuminata, ciliata. *Caulis* subhirsutus, foliis ciliatis villosis. *Petala* valde longa, apice et margine subtus hirta." *Linn. amœn. acad. l. c.*—"*Petala* 6; *Stamina* 12; *Pistilla* 6. *Mygind.*" *Willd. l. c.*

sobolife-rum. 11. S. (Hen and Chicken) propaginibus globosis decidentibus, petalis senis erectis fimbriatis, foliis caulinis imbricatis. *Bot. magaz.* 1457.

—*Sempervivum globiferum. Mill. dict. ed.* 8?
—*Sempervivum petalis fimbriatis sobole compacta. Schmidt. ic. p.* 95. *t.* 26.
HABITAT ....
FLORET Jun. Jul. infrequenter.
CULT. ....

S. (Globiferous) foliis ciliatis, propaginibus globosis. *Willd. sp. pl.* 2. *p.* 932.—*Hort. kew. ed.* 2. *v.* 3. *p.* 172.—*Bot. magaz.* 507 (*excluso synonymo Morisoni*). *globiferum.* 12.
HABITAT in Rutheno. H. ♃.
FLORET Jun. Jul.
INTROD. circa 1798.
"*Petala* 12, *subulato-lanceolata, flava, hirsuta, ciliata. Haller.*"—*Willd. l. c.*

S. (Mountain) foliis integerrimis, propaginibus patulis. *Willd. sp. pl.* 2. 933.—*Hort. kew. ed.* 2. *v.* 3. *p.* 173.—*Pers. syn.* 2. 20.—*Plant. grass. cum icone.* *montanum.* 13.
HABITAT in Helvetia. H. ♃.
FLORET Jun. Jul.
CULT. 1752.

S. (Cobweb) foliis pilis intertextis, propaginibus globosis. *Willd. sp pl.* 2. *p.* 933.—*Hort. kew. ed.* 2. *v.* 3. *p.* 173.—*Bot. magaz.* 68.—*Plant. grass. cum icone.*—*Sempervivum petalis integris, ocellis torulosis. Schmidt. ic. p.* 149. *t.* 38. *arachnoideum.* 14.
HABITAT in Italiæ et Helvetiæ alpibus. H. ♃.
FLORET Jun. Jul.
CULT. 1699.
OBS. This is the Cobweb Sedum of Gardeners, and is indeed one of the most interesting of succulent plants; for, independent of its pretty

red flowers and a peculiar neatness in the whole plant, the spider-webbed appearance of its leaves is very extraordinary. This arises from a dense cottony matter produced in the heart of the plant, protecting the unexpanded leaves from cold, &c.; and which each leaf as it enlarges, detaches a portion of, upon its tip; thus effecting a thread-like connexion from leaf to leaf, and often forming irregular reticulations, neatly and concentrically arranged.

Although, like the rest of this section, (the Cape one excepted,) it is sufficiently hardy to resist the cold of our rigorous winters, upon a wall or a rock, along with other hardy succulent plants; it succeeds better in a glass case, or greenhouse; and is even capable of thriving in the heat of a stove. In the open air succulent plants of the more hardy kind, suffer more in our climate from wet than from cold.

cuspidatum. 15. S. (Pin-pointed) foliis linguæformibus acutis viridibus glabris, mucrone niveo bilineari; floribus densè spicatis. *Haworth. misc. nat.* 186.—*Cotyledon (spinosa) foliis oblongis spinoso-mucronatis, caule spicato. Mill. dict. ed.* 8. *no.* 2?—*Crassula (spinosa) caule simplicissimo, foliis mucronatis, floribus sessilibus lateralibus. Willd. sp. pl.* 1. *p.* 1554.—*Crassula spinosa. Hort. kew. ed.* 2. *v.* 2. *p.* 194?—*Crassula foliis planiusculis mucronatis. Gmel. fl. sib. p.* 173. *t.* 67. *f.* 2.

HABITAT in Siberia. G.H. ♃.

FLORET Aug.—At plantam florentem unam solùm vidi.

CULT. ante 1790.

Herba acaulis cæspitosa. *Radix* fibrosa perennis. *Folia* radicalia numerosissima, densissimè imbricata, orbiculatim nata ut in præcedentibus, at magis erecta; angustè linguæformia acuta vel elliptica carnosa nuda glabra viridia, supra planiuscula, subtus convexa, mucrone recto setaceo niveo bilineari. *Propagines*, exactè ut in præcedentibus, numerosissimi subglobosi breviter pedunculati. *Scapus* strictus dodrantalis subangulatus valde foliosus, foliis subdecurrentibus, superioribus sensim minoribus et angustioribus, supremis omnino bracteæformibus. *Flores* numerosi, densè spicati sessiles vel subsessiles acuti flavicantes, omnibus partibus fructificationis paucioribus quam in præcedentibus et sæpius circiter septem, sed nunquam sex vel quinque.—*Flores* siccos exceptos, non possideo. *Misc. nat. l. c.*

Obs. This can hardly be Miller's Cotyledon spinosa, for that does not appear to be a shy-flowering plant: and he says its flower-stalks rise about four inches high, and support four or five whitish flowers, which are cut at the brim into five parts. These appear in April, and are *sometimes* succeeded by seeds in England. This sort requires a very shady situation, for if it is exposed to the sun in summer, the plants will soon decay. It is propagated by offsets, like the Houseleek, and requires a pretty strong soil." *Mill. dict. l. c.*

Obs. Our plant is a free grower in any *dry* situation, but cannot resist our winters in the open air; and is so extremely difficult to flower, that I have not bloomed it once, although I have tried it in many situations during the last twenty years.

monanthes. 14. S? (Single-flower'd Dwarf) foliis teretibus clavatis confertis, pedunculis nudis subunifloris, nectariis obcordatis. *Willd. sp. pl.* 2. *p.* 934.—*Hort. kew. ed.* 2. *v.* 3. *p.* 174.—*Curt. magaz.* 93.

HABITAT in Canariis. G. H.

FLORET Jul.

INTROD. 1777.

Classis XII.

ICOSANDRIA

MONOGYNIA.

CACTUS. (Melon Thistle.)

Cactus Linn. &c.

Flores in capite tomenti magno cylindrico spinulis commixti, terminali. *Calyx* superus tubulosus sexlaciniatus coloratus lævis. *Corolla* supera hexapetaloidea laciniis patulis. *Stamina* numerosa brevia ore corollæ variè affixa. *Stigma* 5-radiatum. *Fructus* carnosus obconicus unilocularis. *Semina* parva angularia pulpo nidulantia.

OBS. *Suffrutices* rotundati angulati præsingulares, intus carne toto farcti, *absque axe ligneo,* vel foliis: angulis fasciculatim regulariter spinosis: spinis plus minus stellatis.

C. (Turk's-Cap Melon-Thistle) subrotundus quatuordecim-angularis. *Mill. dict. ed.* 8. *Cactus* 1.—*Cactus Melocactus, α, communis. Hort. kew. ed.* 2. *v.* 3. *p.*174.–*Willd. sp. pl.* 2. 938. *Melocactus.* 1.
Habitat in America calidiore. S. ♄.
Floret Jul. Aug.
Cult. ante 1688.

C? (Depressed) subrotundus, depressus, decemangularis.—*Cactus Melocactus* β. *Hort. kew. ed.* 2. *v.* 3. *p.* 174. *depressus.* 2. †
Habitat in America calidiore. S. ♄.
Floret . . .
Introd. ante 1759.
Obs I suspect that this and the following species (whose fructifications are unknown to me) will prove to be a distinct genus. From the common *Turk's-cap* they will probably differ in wanting the Cap; from *Cereus*, in being destitute of a ligneous axis inclosing medulla; and from *Mammillaria*, in not having mammillæ. All other genera in the order are sufficiently remote.

C? (Gibbous) subrotundus, profundè sub-sexdecim angularis; apice depresso, inermi; angulis gibbero notabili sub singulo fasciculo spinarum; spinis nigris. *gibbosus.* 3. *
Habitat . . . . S. ♄.
Floret . . . .
Cult. ante 1808.
Obs. I have not seen this nor any other species with so small a number of angles as ten.—Described from Mr. Vere's collection.

C? (Recurv'd-spined) subrotundus quindecim-angularis, spinis latis recurvis creberrimis.—*Cactus recurvus. Mill. dict. ed.* 8. *no.* 3.— *recurvus.* 4.

Cactus nobilis. *Willd. sp. pl.* 2. 939. *(excluso synonymo Milleri.)—Hort. kew. ed.* 2. *v.* 3. *p.* 175.

HABITAT in Peru. S. ♄.

FLORET ....

CULT. ante 1768.

OBS. Spinæ longè majores quam in cæteris. "This has two orders of thorns; one of which is straight and set on at the joints in clusters, spreading out from the centre each way like a star; and in the middle of each cluster is produced one broad flat thorn near two inches in length, which stands erect, and is recurved at the point, and is of a brownish red colour. These thorns are, by the inhabitants of Mexico, set in gold or silver, and made use of for picking their teeth; and the plant is by them called *Visnaga*, that is, toothpick." *Mill. dict. l. c.*

intortus. 5. C? (Twisted) oblongus, 13—16-angularis, angulis supernè in spiram intortis; spinis mediocribus, subinde subcurvatis.—*Cactus (intortus) subrotundus quindecimangularis, angulis in spiram intortis, spinis erectis.—Mill. dict. ed.* 8. *no.* 2.

HABITAT in Antigua. S. ♄.

FLORET ....

CULT. ante 1768.

OBS. Spinæ subindè variè subcurvatæ, fulvæ, demum fuscæ.

nobilis. 6. * C? (Noble) oblongus multangularis, angulis spinisque mediocribus rectis.

HABITAT in Mexico. S. ♄.

FLORET ....

INTROD. 1796.

Obs. This is the plant called Cactus nobilis in Kew Garden: but the Cactus nobilis of *Willd. sp. pl.* 2. 939. and *Hort. kew. ed.* 2. *v.* 3. *p.* 175. is the Cactus recurvus of Miller, which I conceive to be quite a different species. The present article when old is oblong. The spines are smaller than in most of the preceding species, and the bundles of them are perhaps more contiguous to each other.

Obs. 2. All the plants of this genus, as well as the following one, are extremely interesting to the collector of succulents. They are very tender, so cannot be preserved but in a good stove, and must have scarcely any water given them in the winter season, and if any, in their pans only. Miller speaking of them says: "These strange plants commonly grow upon the steep sides of rocks in the warmest parts of South America, where they seem to be thrust out of the apertures, having little or no earth to support them; their roots shooting down into the fissures of the rock to a considerable depth, so that it is troublesome to get the plants up, especially as they are so strongly armed with thorns as to render it very dangerous to handle them; and as these plants delight in those rocky places, they seldom live long when they are transplanted into better soil by the inhabitants of those islands. If a skilful botanist was to examine these plants in the places of their growth, there would probably be found a much greater variety of them than is at present known. Some of the large sorts which have been brought to England have been more than a yard in circumference, and two feet and a half high,

including their caps; but I have been informed by several persons who have resided in the West Indies that there are plants near twice as large. All the species are plants of a singular structure, but especially the larger kinds of them, which appear like a large fleshy green Melon, with deep ribs, set all over with strong sharp thorns; and when the plants are cut through the middle, their inside is nothing but a soft green fleshy substance; very full of moisture. And I have been assured by persons of credit, who have lived in the West Indies, that in times of great draught, the cattle repair to the barren rocks, which are covered with these plants; and after having ripped up the large plants with their horns, so as to tear off the outside skin with the thorns, they have greedily devoured all the fleshy moist parts of the plants, which has afforded them both meat and drink. But how any animal should ever attack plants which are so well defended by strong thorns, which are as hard and as stiff as whale-bone, or any other bony substance, is difficult to conceive; nor could any thing but distress for moisture ever have tempted them to venture amongst these troublesome plants to search for relief, since they must encounter with many difficulties before they could find a method of dislodging the thorns. The fruit of all the sorts are frequently eaten. They are about three quarters of an inch in length, of a taper form, drawing to a point at the bottom towards the plant, but blunt at the top: the taste is an agreeable acid.—*Mill. dict. l. c.*

MAMMILLARIA. (Mammillary Thistle.)
Cactus Linn. &c.

Calyx superus coloratus 10—12-fidus, laciniis subimbricatis, supernè expansis, infernè coalitis in tubum nudum cylindricum; interioribus petaliformibus. *Stigma* subseptemfidum radiatum.

Obs. Suffrutices rotundati carnosi *absque axe ligneo*, lactescentes aphylli, mammillis crebrè tecti spiniferis; spinis subviginti in stellam ad apicem singulæ mammillæ. *Flores* inter bases mammillarum. *Fructus* bacca parva polysperma edulis coccinea, fere obconica, acidula. *Semina* rotundata parva pallida carne pulposa nidulantia.

M. (Small red spined) simplex, viridis, sub- *simplex.*
rotunda: tecta tuberculis ovatis apice spini- 1.
feris; spinis radiantibus rubris.—*Cactus mammillaris α. Hort. kew. ed. 2. v. 3. p. 175.—Plant. grass. cum icone.*

Habitat in India occidentali. S. ♄.
Floret Jul. Aug.
Cult. ante 1688.

M. (White-spined proliferous) multiplex sub- *prolifera.*
rotunda: tecta tuberculis ovatis apice spi- 2.
niferis; spinis radiantibus albicantibus.—*Cactus mammillaris prolifer. Hort. kew. ed. 2. v. 3. p. 175.*

Habitat in India occidentali. S. ♄.
Floret Jul. Aug.
Cult. ante 1688.

M. (Discolour'd) simplex discolor subrotunda: *discolor.*
tecta tuberculis ovatis apice spiniferis, spinis 3
radiantibus discoloribus. *

HABITAT .... S. ♄.
FLORET ....
CULT. ante 1800.
OBS. Penultima duplo triplove major, atque distincta.
Described from a plant in Mr. Vere's collection.

CEREUS. (Torch-Thistle.)

Miller- &c.—Cactus Linn. &c.

Calyx inferus polyphyllus, imbricatus, foliolis infernè coalitis in tubum longissimum imbricatum; imis sensim minoribus squamæformibus: supremis gradatim majoribus corallinis coloratis expansis. *Stigma* subtredecimfidum, radiatum, petalorum fere altitudine.

OBS. *Frutices* vel arbusculi, aphylli, carnosi, axe centrali ligneo durissimo *medullam* includente: *ramis* remotè subarticulatis longis angulato-sulcatis, angulis regulariter stellatim spinosis. *Flores* e centro spinarum fasciculorum solitarii magni speciosissimi nocturni fugacissimi. *Stamina* numerosissima flore breviora basi coalita cum tubo calycino. *Stylus* prælongus, stamina vix superans. Cætera Cacti; fructibus majoribus.

* GRANDANGULARES *erecti altè-sulcati.*

heptagonus. C. (Great seven-angled) erectus oblongus septemangularis. *Linn. hort. cliff.* 181.—*Linn. sp. pl.* 1. 666.—*Willd. sp. pl.* 2. 939.—*Pers. synops.* 2. 22. 12.—*Hort. kew. ed.* 2. *v.* 3. *p.* 176.—*Royen. lug. bat.* 279.—*Cereus erectus octangularis, spinis lana longioribus. Mill. dict. ed.* 8. *no.* 6.—*Cereus erectus crassissimus maximè angulosus, spinis albis pluribus lon-*

1.
†

gissimis lanugine flava. Boerh. index alter. 293.

Habitat in India occidentali. S. ♄.

Floret Jul.

Introd. 1728.

Obs. An a sequenti satis distincta? Nunquam vidi.

C. (Great six-angled) erectus sexangularis longus: angulis distantibus. *Linn. hort. cliff.* 181.—*Willd. sp. pl.* 2. *p.* 940.—*Persoon. synops.* 2. 22. 11.—*Mill. dict. ed.* 8. *no.* 1.—*Cereus erectus maximus americanus hexangularis, flore albo radiato. Bradl. succ.* 1. *p.* 1. *t.* 1. *hexagonus.* 2.

Habitat in Surinam. S. ♄.

Floret Jul. Aug.

Introd. 1690.

Obs. Variat angulis 5—8.

C. (Great peruvian) erectus longus suboctangularis: angulis obtusis. *Willd. sp. pl.* 2. 941.—*Hort. kew. ed.* 2. *v.* 3. *p.* 177.—*Plant. grass. cum icone.* *peruvianus.* 3.

Habitat in Peru. S. ♄.

Floret Aug.

Introd. 1728.

C. (Noble) magnus subquinquangularis, sulcis profundis; spinis numerosis, sæpe uncialibus, fulvis. *nobilis.* 4. *

Habitat in India occidentali. S. ♄.

Floret ....

Introd. 1811 a Dom. Beake, qui communicavit.

Obs. Ferocior quam cæteris, a spinis prægrandibus, valde numerosis. Forte nimis affinis C. heptagono.

tetragonus. 5. C. (Great four-angled) quadrangularis longus erectus: angulis compressis. *Willd. sp. pl.* 2. *p.* 939.—*Hort. kew. ed.* 2. *v.* 3. *p.* 176.—*Mill. dict. no.* 2.

HABITAT in America meridionali. S. ♄.

FLORET Jul.

CULT. 1710.

pentagonus. 6. C. (Five-angled) erectus subquinquangularis longus articulatus. *Linn. hort. cliff.* 182.—*Willd. sp. pl.* 2. *p.* 940.—*Hort. kew. ed.* 2. *v.* 3. *p.* 176.

** GRANDANGULARES, PROCUMBENTES, *vel* SCANDENTES; *ramis* 3-4-*quetris, radiculis lateralibus.*

triangularis. 7. C. (Great triangular) repens triangularis. *Willd. sp. pl.* 2. *p.* 943.—*Hort. kew. ed.* 2. *v.* 3. *p.* 178.—*Cereus (compressus) repens triangularis, angulis compressis. Mill. dict. ed.* 8. *no.* 10.

HABITAT in India occidentali. S. ♄.

FLORET Jul. Aug.

CULT. 1790.

OBS. This species has perhaps the largest flower in the whole genus, but is so remarkably shy in producing it with us, that few have seen it. Miller never saw it, but mentions its having flowered at Hampton Court, and also at Wentworth Hall in Yorkshire, the seat of the Marquis of Rockingham. In Yorkshire it has also *recently* produced its large blossoms, but I had no opportunity of describing them.

OBS. 2. *Sulci* angulorum profundissimi. *Spinæ* exiguæ quatuor singulo fasciculo, decussatæ.

C. (Quadrangular) repens 3-4-angularis, angulis vix canaliculatis, spinis 5—7 stellatim fasciculatis 1—3-linearibus.—*Cactus repens subquinqueangularis. Plum. americ. t.* 199. *f.* 1. *quadrangularis.* 8. *

Habitat in America meridionali. S. ♄.
Floret ....
Cult. ante 1809.
Obs. Forte sequentis varietas.

C. (Small triangular) repens triqueter angulis vix canaliculatis, spinis 5—7 stellatim fasciculatis sublinearibus.—*Cactus triqueter β. Nobis in misc. nat. p.* 190.—*Cactus caule triangulari, articulato. Plum. americ. t.* 200. *f.* 2. *trigonus.* 9. *

Habitat in America meridionali. S. ♄.
Floret ....
Cult. ante 1809.
Obs. Communicavit amicus Dom. Aiton, cum præcedente.

C. (Least triangular) decumbens, triqueter, spinis fasciculatis divaricatis septenis 2-3-linearibus.—*Cactus triqueter. Nobis in misc. nat. p.* 189. *triqueter.* 10. *

Habitat in America meridionali? S. ♄.
Floret ....
Cult. ante 1794.
Obs. Suffrutex subramosus aphyllus succulentus 2—5-pedalis et ultra. *Caulis* triqueter subramosus carnosus omnino decumbens, angulis rectis (nec undulatis) fasciculato-spinosis. *Rami* pauci alterni pervirides cauli conformes, sæpe remoti, angulis subinde obsoletè concavis, fasciculis spinarum approximatarum instructi. *Spinæ* circiter septem divaricatæ pun-

gentes sordide fulvæ in singulo fasciculo, præterea lana brevissima pulvinatim collecta ad bases spinarum, oculo inarmato vix conspicua. *Miscel. nat. l. c.*

*** PARVANGULARES, *erecti, graciles, sulcis minimè profundis.*

Royeni. 11. C. (Royen's Nine-angled) erectus articulatus novem-angularis: articulis subovatis, spinis lanam æquantibus. *Willd. sp. pl.* 2. *p.* 941. —*Hort. kew. ed.* 2. *v.* 3. *p.* 177.—*Cereus lanuginosus. Mill. dict. ed.* 8. *no.* 7 —*Cereus erectus fructu rubro non spinoso. Herm. par. bat.* 114.

HABITAT in India occidentali. S. ♄.

FLORET ....

INTROD. 1728.

lanuginosus. 12. C. (Woolly) erectus longus subnovem-angularis: angulis obsoletis, spinis lana brevioribus. *Willd. sp. pl.* 2. *p.* 94.—*Hort. kew. ed.* 2. *v.* 3. *p.* 177.—*Cereus erectus fructu rubro non spinoso lanuginosus. Herm. par. bat.* 115. *t.* 115.—*Cereus repandus. Mill. dict. ed.* 8.

HABITAT in India occidentali. S. ♄.

FLORET Jul.

INTROD. 1690.

griseus. 13. * C. (Grey-spined) erectus sublongus suboctangularis altè sulcatus, basi ramosus; spinis senectis subinde semuncialibus, albis apice nigris.

HABITAT in America meridionali. S. ♄.

FLORET ....

CULT. ante 1809.

OBS. Lana nulla conspicua inter spinas. From Mr. Vere's collection.

C. (Tawny-spined) erectus longus subnovem-angularis minime sulcatus ramosusve, spinis validis fulvescentibus, senectis subinde uncialibus.—*Cereus Royeni. Mill. dict. ed.* 8.—*nec aliorum.* *fulvispinosus.* 14. *

Habitat in America meridionali. S. ♄.

Floret . . .

Cult. ante 1795.

Obs. This is an old inhabitant of Chelsea Physic Garden.

C. (Waved) erectus longus octangularis: angulis compressis undatis, spinis lana longioribus. *Willd. sp. pl.* 2. *p.* 940.—*Hort. kew. ed.* 2. *v.* 3. *p.* 177.—*Cereus (gracilis) erectus gracilior novem-angularis spinis brevibus, angulis obtusis. Mill. dict. ed.* 8. *no.* 8.—*Cereus erectus gracilior, fructu extus luteo, intus niveo, seminibus nigris pleno. Trew. ehret.* 3. *t.* 14. *repandus.* 15.

Habitat in India occidentali. S. ♄.

Floret . . . .

Introd. 1728.

C? (Cylindric) erectus debilis cylindricus non angulatus, superficie sulcis decussatis reticulata. *Willd. sp. pl.* 2. *p.* 939.—*Hort. kew. ed.* 2. *v.* 3. *p.* 176. *cylindricus.* 16.

Habitat in Peru. S. ♄.

Floret . . . .

Introd. 1799.

Obs. *Lana* spinis junioribus longior alba. *Foliola* minuta Opuntiæ gerit subtus spinarum fasciculos. *Flores* non vidi.

Obs. 2. Since the above was written I have found this plant is nearly destitute of the central woody axis of the *Cerei*, whereby, as well

as in the minute foliation and reticulation, and want of angulation, above described, it nearer approaches the *Opuntiæ*; and have no doubt but it will eventually prove generically distinct from both.

**** PARVANGULARES, PROSTRATI, *vel scandentes, ramis tereti-multangularibus, radiculis lateralibus.*

grandiflorus. 17. C. (Great night-flowering) repens subquinquangularis. *Linn. sp. pl.* 1. 668.—*Willd. sp. pl.* 2. *p.* 941.—*Hort. kew. ed.* 2. *v.* 3. *p.* 178.—*Plant. grass. cum icone.*—*Bot. repos.* 508.—*Mill. dict. ed.* 8. *Cereus no.* 11.—*Cereus scandens minor polygonus articulatus. Mill. icon. t.* 90.—*Cereus gracilis scandens ramosus plerumque sexangularis, flore ingenti atque fragranti. Trew. ehr. t.* 31.

HABITAT in Jamaica et Vera Cruce. S. ♄.

FLORET Jun.—Aug.

CULT. ante 1700.

OBS. Miller, speaking of this celebrated plant, says—

"When arrived at sufficient strength it will produce many exceeding large, beautiful, sweet-scented flowers; but they are (like most of the flowers of these kinds) of very short duration, scarcely continuing full blown six hours; nor do the same flowers ever open again, when once closed: they begin to open in the evening between seven and eight of the clock, are full blown by eleven, and by three or four the next morning fade, and hang down quite decayed: but, during their continuance, there is scarce any flower of *greater beauty*, or that makes *a more magnificent* appearance;

for the calyx of the flower, when open, is near a foot in diameter; the inside of which, being of a splendid yellow colour, appears like the rays of a bright star, the outside of a dark brown: and the petals of the flowers being of a pure white, adds to the lustre; and the vast number of recurved stamina surrounding the style in the center of the flower, make a fine appearance; and add to this the *fine scent* of the flower, which perfumes the air to a considerable distance: there is scarce any plant which *deserves* a place in the Hothouse *so much as this*, especially as it is to be trained against the wall, where it will not take up room. The usual season of its flowering is in July; and when the plants are large, they will produce a great number of flowers, so that there will be a succession of them for several nights, and many of them will open the same night. I have frequently had six, eight, or ten flowers open at the same time upon one plant, which have made a most magnificent appearance by candle light, but none of them have been succeeded by any appearance of fruit."—*Mill. dict. l. c.*

C. (Creeping-Cereus) repens decemangularis. *Linn. sp. pl.* 1. *p.* 608.—*Willd. sp. pl.* 2. *p.* 942.—*Hort. kew. ed.* 2. *v.* 3. *p.* 178.—*Curt. magaz.* 1.—*Plant. grass. cum icone.*—*Mill. dict. ed* 8. *Cereus* 12. *flagelliformis.* 13.

HABITAT in America calidiore, atque in Arabia deserta. G. H. ♄.

FLORET Jun. Jul.

INTROD. 1690.

OBS. Miller well observes that, "this sort produces a greater number of flowers than any of

the others; these are of a fine pink colour both within and without; the petals are not so numerous, and the tube of the flower is longer than those of the other species; and, contrary to all the other sorts, keeps open three or four days, provided the weather is not too hot, or the place where they stand kept too warm. During the continuance of these flowers they make a fine appearance. It may be placed amongst the first class of exotic plants; it has produced fruit in Chelsea Garden, but not yet ripened it." — *Mill. dict. l. c.*

Obs. 2. I have ripened in two different seasons many of the fruit of this Cereus. Like most of the other species, they take two years to mature in a Greenhouse; are roundish, and of a dull yellow-greenish colour, and about the size of the old green-hairy Gooseberry, and full of a sweetish-acid eatable pulp.

It is said to be one of the few plants which can exist in the sandiest deserts of Arabia.

RHIPSALIS. *Gært. Cactus Linn. &c.*

Calyx superus, tri- l. quadripartitus, brevissimus: dentibus acuminatis, membranaceis, tenuissimis. *Cor.* . . . *Stam.* . . . *Stylus.* . . . *Bacca* infera, unilocularis, pellucida. *Semina* duodena, centralia. *Gært. sem.* 1. 137. *t.* 28. *f.* 1.

Cassutha. 1. R. (Naked) pendulis ramis verticillatis teretibus glabris muticis nudis viridibus.—*Rhipsalis Cassutha. Gært. sem. l. c.*—*Cactus pendulus. Willd. sp. pl.* 2. *p.* 912.—*Hort. kew. ed.* 2. *v.* 3. *p.* 178.—*Cactus parasiticus inermis aphyllus ramosus propendens, ramulis gracili-*

bus teretibus striatis. Browne's jam. 238.—
Cassutha filiformis. Mill. dict. ed. 8.
HABITAT in India occidentali. S. ♄.
FLORET Sept.
INTROD. 1758.

R. (Pilose) pendulis ramis verticillatis teretibus viridibus, junioribus subpilosis, pilis albis, fasciculatis; fasciculis ordine quincunci dispositis. —*Cactus parasiticus. Plant. grass. cum icone.* *parasiticus.* 2.
HABITAT in America meridionali. S. ♄.
FLORET....
CULT. circa 1800.
OBS. Vidi ni male memini crescentem, regio horto Kewense.
OBS. 2. The Opuntia minima flagelliformis of Plumier appears to be a third species of this singular genus.

OPUNTIA. (Indian-Fig.)

Miller. &c.—Cactus Linn. &c.

Calyx superus polyphyllus rosaceus, corollam simulans absque tubo, interioribus foliolis omnino corollaceis. Cætera fere ut in Cereo. *Frutices* præsucculenti fere aphylli ligno centrali nullo: *ramis* compressis, articulis proliferis ovatis oblongisve subreticulatis planis, fasciculato spinosis, fasciculis in quincuncis. *Flores* speciosi terminales. *Bacca* magna edulis pulposa.

* GRANDISPINOSÆ *articulis subovatis: spinis variis, minoribus sublinearibus, majoribus* 4—15-*linearibus.*

O. (Great black-spined) erecta articulis late ovato-oblongis, spinis subulatis longissimis *elatior.* 1.

nigricantibus.—*Opuntia (elatior) articulis ovato-oblongis, spinis longissimis nigricantibus. Mill. dict. ed. 8. no. 4. Cactus Tuna β. Willd. sp. pl. 2. p. 944.—Hort. kew. ed. 2. v. 3. p. 179.—Tuna elatior, spinis validis nigricantibus. Dill. elth. 395. t. 291. f. 379.*

Habitat in America merid. S. ♄.

Floret Jul. Aug.

Cult. 1731.

Obs. Limbs of most of the Opuntiæ will live out of the ground half a year, if kept cool and dry, (but above freezing point,) and as they abound in highly antiscorbutic juice and pulp, have been found very serviceable at sea in long voyages, after other vegetables have been exhausted.—They are easily procured in hot climates, and appear to be worthy the mariner's further attention.

Tuna. 2. O. (Great yellow-spined) erecta, articulis late ovato-oblongis, spinis subulatis longis flavis.—*Opuntia (Tuna) articulis ovato-oblongis, spinis subulatis. Mill. dict. ed. 8. no. 3.—Cactus Tuna. Willd. sp. pl. 2. p. 944.—Cactus Tuna α. Hort. kew. ed. 2. v. 3. p. 179.—Tuna major, spinis validis flavicantibus, flore gilvo. Dill. elth. 396. t. 295. f. 380.—Cactus cochinellifer. Plant. grass. cum duabus tabulis.*

Habitat in America meridionali. S. ♄.

Floret Jul. Aug.

Cult. 1731.

β spinis (exceptis in senectis articulis) uniformibus brevissimis piliformibus.—*Tuna major, spinis validis flavicantibus, flore sulphureo. Dill. elth. p. 398. t. 294. f. 382?*

O. (Lesser black-spined) erecta, articulis oblongis lanceolatisque, spinis diversiformibus fulvo-nigris, majoribus divaricatis 3—10-linearibus.—*Cactus nigricans. Nobis in misc. nat. p.* 137. *nigricans.* 3. *

HABITAT.... S. ♄.
FLORET Aug.
CULT. circa 1795.

OBS. *Caudex* erectus spinosus carnosus compressus articulatus subramosus, per ætatem lignosus, atque teretior. *Rami* articulati adscendentes. *Articuli* oblongi et lanceolati carnosi virides spinosi. *Spinæ* fasciculatæ in ordine quincunci ut in affinibus crebræ primo sordidè fulvæ, denique fulvo-nigræ nigricantesve, diversiformes; majores valde divaricatæ. *Folia* minutissima ut in affinibus, subtus spinarum fasciculos, primo erecta, denique expansa atque decidua, subulata, planiuscula sesquilinearia. *Flos* (unicus in horto, Aug. 1810) terminalis. *Germen* ut in O. Tuna, at spinis validioribus. *Petala exteriora* calycina, rosea, extus saturatiora, cuneata, apice subinde emarginata cum acumine: *interiora* ex luteo-fulvicantia. *Filamenta* numerosissima saturatè rosea. *Antheræ* (post anthesin solum vidi) intensè roseæ. *Stylus* magnus albicans. *Stigmata* quinque crassa antheras superantia, incurva, suboblonga luteo-virescentia.

β articulis angustioribus laxioribus, aculeis erectioribus sæpe solitariis.—*Cactus Opuntia Tuna. Plant. grass. cum icone.*

O. (Humble yellow-spined) articulis cuneato-obovatis effuso-decumbentibus; spinis diversiformibus luteis, majoribus erecto-patulis 3— *humilis.* 4. *

14-linearibus.—*Cactus humilis. Nobis in misc. nat. p.* 187.

HABITAT .... S. ♄.

FLORET ....

CULT. circa 1795.

Caudex valde ramosus spinosus carnosus articulatus, demum lignosus. *Rami* irregulares effuso-decumbentes articulati. *Articuli* cuneato-obovati virides percarnosi spinosi, juniores foliosi, ut in priore. *Spinæ* diversiformes fasciculatæ luteæ crebræ, majores erectiusculæ seu erecto-patulæ 3—14-lineares. *Flores* non vidi. *Misc. nat. l. c.*

polyantha. 5. * O. (Many-flower'd) articulis oblongis ovatisque, spinis diversiformibus flavis, majoribus setaceis erecto-patulis; floribus numerosis solitariis plerumque terminalibus flavis.—*Cactus Opuntia polyanthos. Plant. grass. cum icon.*

HABITAT in America calidiore.

FLORET ....

INTROD. ante 1811.

** PARVISPINOSÆ *ovato articulatæ, spinis numerosissimis uniformibus piliformibus, sæpissimè longitudine lineæ.*

vulgaris. 6. O. (Common dwarf) reptans, prostrata; articulis ovatis, spinis uniformibus numerosissimis piliformibus.—*Opuntia (vulgaris) articulis ovatis compressis, spinis setaceis. Mill. dict. ed.* 8 *no.* 1.—*Cactus Opuntia. Linn. sp. pl.* 1. 669.—*Willd. sp. pl.* 2. *p.* 943.—*Hort. kew. ed.* 2. *v.* 3. *p.* 178—*Cactus Opuntia nana. Plant. grass. cum icone?*

HABITAT in America, atque Europa australi.

FLORET Jul. Aug. G. H. ♄.

CULT. 1596.

O. (Oval upright) erecta, articulis ovato-ellipticis, spinis uniformibus numerosissimis brevissimis.—*Cactus strictus. Nobis in misc. nat. p.* 188.—*Cactus Opuntia inermis. Plant. grass. cum icone.* *stricta.* 7. *

HABITAT .... S. ♄.

FLORET ....

CULT. ante 1796.

Caudex erectus spinosus carnosus ramosus, demum lignosus. *Rami* articulati erecti. *Articuli* virides carnosi spinosi, juniores foliosi. *Spinæ* fasciculatæ vix lineares. *Folia* ut in prioribus. *Flores* non vidi.

*** PARVISPINOSÆ, OBLONGO-ARTICULATÆ, *articulis longioribus quam in præcedentibus, spinis fere uniformibus, brevibus vel brevissimis, filiformibus vel subinde setaceis.*

O. (Great oblong) articulis ovato-oblongis crassissimis, spinis inæqualibus. *Mill. dict. ed.* 8. *no.* 5. *Opuntia maxima folio spinoso latissimo et longissimo. Tournef. inst.* 240. *maxima.* 8.

HABITAT in America meridionali. S. ♄.

FLORET ....

CULT. ante 1768.

OBS. Although Miller had this species ten feet high, it never produced its flowers with him.

O. (Indian-fig) articulis ovato-oblongis, spinis setaceis. *Mill. dict. ed.* 8. *no.* 2.—*Cactus Ficus-indica. Linn. sp. pl. p.* 669.—*Willd. sp. pl.* 2. *p.* 914.—*Hort. kew. ed.* 2. *v.* 3. *p.* 179. *Ficus-indica.* 9.

HABITAT in America meridionali. S. ♄.

FLORET Jul. Aug.

CULT. 1731.

cochinellifera. 10. O. (Cochineal) articulis ovato-oblongis subinermibus. *Mill. dict. ed.* 8. *no.* 6.—*Cactus cochinellifer. Linn. sp. pl. p.* 670.—*Willd. sp. pl.* 2. *p.* 944.—*Hort. kew. ed.* 2. *v.* 3. *p.* 179.—*Tuna mitior flore sanguineo cochinellifera. Dill. elth.* 399. *t.* 297. *f.* 383.

HABITAT in America merid. S. ♄.

FLORET Jul.—Sept.

CULT. ante 1688.

OBS. This species has the smallest flowers of any in the genus known to me. It is the most proper to cultivate the Coccus Cacti, or Cochineal Insect, upon; because its spines are far smaller than in any other species, and consequently less annoy the hands employed to collect the Cochineal from it. But the last species, although more spiny, is often grown for the Cochineal. And in all probability the insect would thrive very well upon any of the species: yet perhaps best upon the least spiny.

Miller says: "This species is cultivated in the fields of New Spain, for the increase of the cochineal insects; but it grows naturally in Jamaica, where it is probable the true cochineal might be discovered, if persons of skill were to search for the insects."

OBS. It is more than probable, that any good entomologist would speedily detect the Coccus Cacti wherever any South American species of this genus of plants grows abundantly in a natural state.

lanceolata. 11. O. (Spear-shaped) suberecta, articulis lanceolatis spinis uniformibus brevissimis, foliis trilinearibus.—*Cactus lanceolatus. Nobis in misc. nat. p.* 188.

Habitat in America meridionali? S. ♄.
Floret Jul.
Cult. ante 1796.
Obs. *Caudex* primo erectus, demum suberectus, subinermis carnosus, sed per ætatem ramosus articulatus et lignosus. *Rami* etiam articulati erecti. *Articuli* lanceolati virides carnosi subinermes, juniores valde foliosi. *Spinæ* fasciculatæ uniformes, brevissimæ omnium (excepta præcedente). *Foliola* triplo majora quam in aliis, seu trilinearia et ultra. *Flos* (in horto Jul. 1808) superus terminalis quadriuncialis transversè, nitide luteus, fere ut in Cacto Opuntia, auctorum. *Filamenta* saturate lutea, petalis plus duplo breviora. *Stylus* longitudine staminum albidus. *Stigmata* quinque crassa obtusa bilinearia sulphurea.

**** Spinosissimæ, *articulis longissimis.*

O. (Horrid) articulis longissimis tenuibus compressis, spinis longissimis confertissimis gracilibus albicantibus armatis. *Mill. dict. ed.* 8. *no.* 8.—*Cactus (spinosissimus) caule erecto compresso, ramis oppositis bifariis compressis, spinis setaceis. Hort. kew. ed.* 1. *v.* 2. *p.* 155. *ed.* 2. *v.* 3. *p.* 179.—*Willd. sp. pl.* 2. *p.* 945. —*Martyn. hort. cant.* 88.—*Cactus (spinosissimus) suberectus compressus, articulis cruciatim dispositis, spinis creberrimis longis flavescentibus. Lamarck. enc.* 1. *p.* 537. *spinosissima.* 12.

Habitat in Jamaica. S. ♄.
Floret Jul. rarissimè.
Cult. ante 1768.
Obs. Miller observes; "The spines are very long, slender, and of a yellowish brown colour,

coming out in clusters all over the surface of the branches, crossing each other, so as to render it dangerous to handle; for upon being touched, the spines adhere to the hand and quit the branches, and penetrate into the flesh, so become very troublesome. It was sent me from Jamaica by the late Dr. Houstoun, who found it growing naturally there in great plenty, but could never observe either fruit or flower upon any of the plants, nor have any of them produced either in England."

Obs. I have never seen the flowers of this species, neither have any of the Gardeners or Nurserymen near London, as far as I can learn, nor is it marked as having produced any in any of the different editions of the Hortus Kewensis, or Donn's Catalogue of the Cambridge Garden: but it has blossomed once with my brother in Yorkshire, to whom I have imparted all the succulent plants in my power. Its flowers, I understand, resembled those of the other Opuntias.—The plant often arises erect to the height of fifteen or twenty feet, and the young branches become exsiccated and fall off as new ones are produced; so that the stem is always simple, except at the very top, where a few cruciated single-jointed branches appear. The older the plant is, the larger and more numerous the spines become; until at length they cover the whole stem in one horrid, interwoven, and impenetrable mass.

***** DIVARICATÆ, *articulis exiguis lineari-lanceolatis, valde spinosis, procumbentibus.*

O. (Greater Pin-pillow) articulis fragilibus lineari-lanceolatis subdivaricatis, spinis difformibus, majoribus 3—10-linearibus.—*Cactus pusillus. Nobis in misc. nat. p.* 189. *pusilla.* 13. *

HABITAT in America meridionali? S. ♄.

FLORET Jun.

INTROD. circa 1805.

OBS. *Caudex* compressus valde ramosus articulatus spinosus carnosus. *Rami* etiam articulati plurimi, oppositi et alterni; senecti divaricati. *Articuli* angustè sublanceolati compressi spinosi foliolosi virides. *Spinæ* difformes fasciculatæ; majores pauciores quam in affinibus, seu 1-2 vel 3, patulæ sive expansæ, ex albido flavicantes 3—10-lineares. *Foliola* ut in cæteris, sed magna ratione articulorum magnitudinis, seu fere trilinearia viridia. *Flores* (in horto Jun. 1796) superi numerosi, ramulos juniores terminantes, at solitarii, ut in Cacto Opuntiâ auctorum, cui simillimi atque lutei. *Calyx* quinquephyllus, foliolis valde inæqualibus, duobus exterioribus multoties majoribus oblongis obtusis cum mucrone carnoso, et ad latera altè membranaceis; tribus interioribus obcuneatis, margine ultimo tantum membranaceo. *Petala* circiter octo cuneato-oblonga perobtusa cum mucrone debili, foliolis exterioribus calycinis fere duplo longiora, integriuscula subdiaphana, ad solem pulchrè micantia. *Stamina* numerosa erecta valida fulva, basin versus pallidiora, foliolis majoribus calycinis aliquantulum breviora. *Antheræ* post

fœcundationem parvulæ albæ (juniores non vidi). *Pollen* luteum. *Stylus* validissimus teres erectus albidus, antheras paululum superans. *Stigmata* 3-4 itidem valida, et albida, incurvatim erecta.

curassavica. 14. O. (Pin-pillow) articulis fragilibus cylindrico-ventricosis compressis valde divaricatis. - *Opuntia (Curassavica) articulis cylindrico-ventricosis, compressis, spinis setaceis. Mill. dict. ed. 8. no. 7.—Cactus curassavicus. Willd. sp. pl. p. 945.—Hort. kew. ed. 2. v. 3. p. 179.—Opuntia minima americana spinosissima. Bradl. succ. 1. p. 5. t. 4.*

HABITAT in Curassao. S. ♄.

FLORET Jun. Jul.

INTROD. 1690.

OBS. This is a very shy-flowering plant, and has only once attempted to blossom with me: but it has several times flowered with my brother in Yorkshire. Its branches are so extremely brittle that they break off at the joints on the slightest touch, adhering to the flesh or clothes of any person coming in contact with them; and create much pain and trouble to disengage, as their long sharp prickles are thickly and reversely barbed with invisible points. Miller says it is called Pin-Pillow in the West Indies, from the appearance which the plump branches have to a pincushion stuck full of pins.

I cultivate three varieties of the Pin-pillow, viz.

α. *(major,)* ramis spinisque majoribus, magisque divaricatis.

β. *(media,)* ramis spinisque paulo minoribus.

γ. *(minor,)* ramis duplo minoribus quam in

α,—junioribus fere inermibus purpurascentibus.

EPIPHYLLUM. *(Herm.)* *Cactus Linn. &c.*

Corolla supera, polypetaloidea, rosacea, tubo longissimo fere pedali, flexuoso, parum squamato. *Stamina* ore tubi affixa, vel in tubum connata. *Stylus* longissimus. *Stigmata* 10-11.—*Character* ex Dillenii descriptione.—*Flores* perfectos non vidi.

E. (Spleen-wort-leav'd) proliferum læve ramosum ensiformi-compressum, serrato-repandum, costa centrali lignea.—*Cactus Phyllanthus. Linn. sp. pl.* 1. *p.* 670.—*Willd. sp. pl.* 2. *p.* 946.—*Hort. kew. ed.* 2. *v.* 3. *p.* 180.—*Cereus scolopendrifolio brachiato. Dill. elth.* 73. *t.* 64. *f.* 74.—*Phyllanthos americana, sinuosis foliis longis. Pluk. alm.* 296. *t.* 247. *f.* 5.—*Opuntia (Phyllanthus) prolifer ensiformi-compressus serrato-repandus. Mill. dict. ed.* 8. *no.* 9.—*Ficus s. Opuntia non spinosa, scolopendriæfolio sinuato. Raj. dendr.* 21. *Phyllanthus.* 1.

HABITAT in Amer. merid. S. ♄.

FLORET Jun.—Sept.

CULT. 1710.

OBS. Cactus alatus of Swartz is another species of this singular Genus, which there can be no doubt of being as natural as it is distinct.

PERESKIA. *Miller. &c.*—*Cactus Linn. &c.*
(Barbadoes Gooseberry.)

Flores paniculati. *Corolla* polypetaloidea rosacea, absque tubo. *Stamina* .... *Stylus* contortus. *Fructus* baccatus foliosus grossularinus. *Semina* pulpo nidulantia. *Character* ex

Dillenii descriptione. *Frutices* ramosi erecto-debiles. *Rami* præcipue senecti spinarum patentium fasciculis sparsim instructi, teretes. *Spinæ* primò intrafoliaceæ. *Flores* non vidi.

aculeata. 1. P. (Short-spined) foliis ellipticis carnosis, spinis subinde semuncialibus, gemmis parum lanatis.—*Pereskia. Linn. hort. cliff.* 122.—*Pereskia (aculeata) aculeata, flore albo, fructu flavescente. Plum. nov. gen.* 37.—*Dill. elth. p.* 305. *t.* 227. *f.* 294.—*Mill. dict. ed.* 8.—*Cactus Pereskia. Linn. sp. pl.* 1. 671.—*Willd. sp. pl.* 2. *p.* 946.—*Hort. kew. ed.* 2. *v.* 3. *p.* 180.—*Portulacca americana latifolia ad foliorum ortum lanugine obducta, longioribus aculeis horrida. Pluk. alm.* 135. *t.* 215. *f.* 6.

Habitat in Ind. occident. S. ♄.

Floret Oct. Nov.

Cult. 1696.

Obs. Miller informs us that "this plant grows in some parts of the Spanish West Indies, from whence it was brought to the English settlements in America, where it is called a Gooseberry, and by the Dutch it is called Blad Apple—that the fruit is about the size of a Wallnut, having tufts of small leaves on it, and hath a whitish mucilaginous pulp." *Mill. dict. l. c.*

longispina. 2. * P. (Long-spined) foliis ellipticis carnosis, spinis subinde sesquiuncialibus, gemmis valde lanatis.

Habitat in America meridionali? S. ♄.

Floret ....

Cult. ante 1808.—Communicavit Dom. Gul. Anderson.

Obs. Cactus Portulaccæfolius is another species of this Genus—it is said to be the size of a small Apple-tree, with flowers resembling the Dog-rose, and a green apple-shaped fruit. It has not yet, that I know of, been introduced into our gardens.

TRIGYNIA.

SESUVIUM. *Gen. pl.* 856.

Calyx 5-partitus, coloratus. *Petala* 0. *Capsula* ovata, trilocularis, circumscissa, polysperma.

S. (Purslane-leav'd) *Portulacastrum.* 1.
Sesuvium Portulacastrum. Willd. sp. pl. 2. *p.* 1009.—*Hort. kew. ed.* 2. *v.* 3. *p.* 205.—*Plant. grass. cum icone.*—*Portulacca patens. Bot. rep.* 253. (quæ erronea citata est in *Hort. kew. ed.* 2. *v.* 3. *p.* 148.)

PENTAGYNIA.

TETRAGONIA. *Gen. pl.* 859.

Calyx superus, 4-5-partitus. *Corolla* nulla. *Pericarpium* nucleo 5—8-loculari. *Nobis in misc. nat.* 117.

* Sessiles. *Floribus axillaribus sessilibus.*

T. (Horned) suffrutescens, foliis ovato-rhombeis, fructibus quadricornibus. *Nobis in misc. nat.* 119.—*Willd. sp. pl.* 2. *p.* 1024.—*Hort. kew. ed.* 2. *v.* 3. *p.* 211.—*Tetragonia Halimifolia. Forst. prod. p.* 39.—*T. Japonica. Thunb. fl. jap.* 208.—*Demidovia Tetragonides. Pallas hort. demidof. p.* 150. *expansa.* 1.

HABITAT in Nova Zeelandia—Insulis Amicorum—atque in Japonia. G. H. ♄.
FLORET Aug. Sept.
CULT. ante 1794.

crystallina. 2. T. (Crystalline) herbacea, pruinosa, foliis ovatis sessilibus; fructibus inermibus, infimis subpedunculatis, supremis sessilibus.—*Nobis in misc. nat. p.* 120.—*L'Herit. stirp. nov. p.* 81. *tab.* 39.—*Hort. kew. ed.* 2. *v.* 3. *p.* 212.—*Willd. sp. pl.* 2. *p.* 1025.—*Plant. grass. cum icone.*
HABITAT in Peru. G. H. ⊙.
FLORET Jun.—Aug.
INTROD. 1788.

** PEDUNCULATÆ. *Floribus semper pedunculatis.*

fruticosa. 3. T. (Shrubby) fruticosa erecta, foliis elliptico-lanceolatis, fructibus obtusè 7-8-angulatis.—*T. fruticosa. Nobis in misc. nat.* 120.—*Willd. sp. pl.* 2. *p.* 1023?—*Evonymo affinis, africana flore luteo, Portulaccæ folio. Seba. thes.* 2. *p.* 13. *t.* 11. *f.* 8.—*Tetragonocarpos; africana; fruticans; foliis longis et angustis. Boerh. ind.* 278. 7.—*Ind. alt.* 2. 262. 1.—*Commel. hort. amstel.* 2. 205. *t.* 103.
HABITAT ad Caput Bonæ Spei. G. H. ♄.
FLORET Jul.—Sept.
CULT. 1712.

decumbens. 4. T. (Trailing) suffruticosa, decumbens, pruinosa, foliis obovatis, pistillis duobus, fructibus alatis.—*T. decumbens. Nobis in misc. nat. p.* 121.—*Willd. sp. pl.* 2. *p.* 1023.—*Hort. kew. ed.* 2. *v.* 3. *p.* 211.—*Plant. grass. cum icone.*—*Tetragonocarpos afra, folio Portulaccæ lon-*

go, flore herbaceo. Boerh. ind. alt. 2. 262. 3. —*Tetragonia* β. *Linn. hort. cliff.* 188.

HABITAT C. B. S. G. H. ♄.

FLORET Jul.—Sept.

CULT. 1758.

T. (Wing-seeded) suffruticosa, procumbens, foliis sessilibus lanceolatis subdecurrentibus, alis druparum 8, alterne diminutis.—*T. Tetrapteris. Nobis in misc. nat. p.* 121.—*Tetrapteris frutex africanus Linariæ folio crassiore, fructu quadripinnato, quaternis membranaceis extantibus alis, donato. Pluk. amalth. p.* 200. —*Tetragonia* α. *Linn. hort. cliff.* 188.—*Tetragonocarpos; præcedenti similis; fructu rotundo tetragono umbilicato. Boerh. ind. alt.* 2. 262. 2. *Tetrapteris.* 5. *

HABITAT ad Caput Bonæ Spei. G. H. ♄.

FLORET Jul.—Sept.

CULT. circa 1795.

T. (Spiked) glabra, subherbacea, erecta, foliis inferioribus ovatis, supremis lanceolatis glabris, floribus racemosis. *Linn. supp. pl.* 258. —*Thunb. prod.* 87.—*Gmel. syst. nat. f.* 2. 843. 5.—*Willd. sp. pl.* 2. *p.* 1004.—*Nobis in misc. nat. p.* 122. *spicata.* 6.

HABITAT C. B. S. G. H. ♄.

FLORET Jul.

INTROD. circa 1795.

T. (Tuberous-rooted) subherbacea, lævis, foliis ovatis petiolatis, fructibus alatis, radice strumosa —*T. herbacea. Nobis in misc. nat. p.* 122. —*Willd. sp. pl.* 2. *p.* 1023.—*Hort. kew. ed.* 2. *v.* 3. *p.* 211.—*Tetragonocarpos afri. radice magna crassa et carnosa. Comm. hort. amst. p.* 201. *t.* 102. *herbacea.* 7.

HABITAT C. B. S. G. H. ♄. s. ♃.
FLORET Aug. Sept.
CULT. ante 1752.

echinata. 8. T. (Hedge-hog) herbacea, foliis rhombeo-ovatis, fructibus echinatis. *Willd. sp. pl.* 2. *p.* 1024.—*Gmel. syst. nat.* 2. 843. 7.—*Hort. kew. ed.* 1. *v.* 2. *p.* 177.; *et ed.* 2. *v.* 3. *p.* 211.—*Nobis in misc. nat. p.* 123.
HABITAT C. B. S. G. H. ⊙. s. ♂.
FLORET Mai.—Aug.
INTROD. 1774.

MESEMBRYANTHEMUM. (Fig-Marygold.)
Gen. pl. 860.

Calyx 5-fidus. *Petala* numerosa, linearia, basi cohærentia. *Capsula* carnosa, infera, polysperma.

* SUBACAULIA. *Caulibus nullis, vel brevissimis, radice perenni.*

† MINIMA; *obconica, seu obcordata, foliis punctatis retusissimis, et connatis usque ad apices: floribus sessilibus, laciniis infernè plus minusve coalitis in tubum gracilem.*

minutum. 1. * M. (Small, dotted Dumplin) læve glaucum subimmaculatum, corollæ laciniis læte rubicundis, basi connatis in tubo prægracili, germine incluso.—*M. minutum. Nobis in misc. nat. p.* 21.—*Bot. magaz.* 1376.—*Hort. kew. ed.* 2. *v.* 3. *p.* 212.
HABITAT C. B. S. G. H. ♃.
FLORET Nov.—Jan.
INTROD. casualiter cum terra arenosa capense, inter Stapelias vivas, anno 1795.
OBS. Sæpe gerit maculas parvas distinctas punctiformes.

M. (Small chequer'd Dumplin) læve subglau- *mini-*
cescens, maculis confluentibus subramosis, *mum.*
corolla albicante, germine exerto.—*M. mini-* 2.
mum. Nobis in miscel. nat. p. 21.—*Hort.* *
kew. ed. 2. *v.* 3. *p.* 212.—*Willd. sp. pl.* 2.
p. 1032, *sub sectione caulescente !*
HABITAT C. B. S. G. H. ♃.
FLORET Oct.—Jan.
INTROD. ante 1776.—*secundum H. k. l. c.*

M. (Glaucous checquer'd Dumplin) glauces- *obcordel-*
cens, maculis confluentibus ramosis, corolla *lum.*
albicante, germine incluso.—*M. obcordellum.* 3.
Nobis in miscel. nat. p. 21.—*Hort. kew. ed.* 2. *
v. 3. *p.* 212.
HABITAT C. B. S. G. H. ♃.
FLORET Oct.—Jan.
INTROD. circa 1776.—*secundum H. kew. l. c.—*
at non vidi in Horto ipso ante 1794.

M. (Green, chequer'd Dumplin) virescens, ma- *obconel-*
culis confluentibus subtuberculiformibus, co- *lum.*
rolla alba, germine incluso.—*M. obconellum.* 4.
Nobis in miscel. nat. p. 21.—*Hort. kew. ed.* 2. *
v. 3. *p.* 212.
HABITAT C. B. S. G. H. ♃.
FLORET Oct.—Jan.
INTROD. circa 1786.—*secundum Hort. k. l. c.—*
at non vidi in ipso Horto ante 1794.

M. (Great, dotted Dumplin) subglaucum valde *trunca-*
depressum, maculis punctiformibus sub-di- *tellum.*
stinctis, corolla straminea, germine exerto.— 5.
M. truncatellum. Nobis in miscel. nat. p. 22. *
Hort. kew. ed. 2. *v.* 3. *p.* 213.
HABITAT C. B. S. G. H. ♃.
FLORET Oct.—Jan.
INTROD. 1795.

fibulæforme. 6. * M. (Cloth-button) subcanescens, subpubescens, immaculatum, valde depressum.—*Nobis in miscel. nat. p. 22.—Hort. kew. ed. 2. v. 3. p. 213.*

Habitat C. B. S. G. H. ♃.

Floret....

Introd. 1795.

Obs. All the species of the above division will live and flower in the Greenhouse, if kept on a shelf very near the sloping lights, and watered very sparingly, and at distant intervals in winter. All the dwarf species in the genus delight in a similar situation and treatment; but the woody ones require water as often as a horseshoe Geranium, and a great deal of air: indeed many of them will live in a common frame, if kept sufficiently dry, (with the lights off in all fair, and not frosty weather) and protected from frost by matts or litter occasionally; but dislike being hid from the light: a slight frost will not kill them.

If the species of the above section become too wet from drips, or otherwise, they speedily rot; unless taken out of the earth, and laid like bulbs in a shady part of the Greenhouse a few hours, or even days, to dry. They will live out even several months in winter without injury.

†† Sphæroidea, *foliis connatis fere ad apices, absque punctis papulisve.*

nuciforme. 7. * M. (Nut-shaped) sphæroideum, glaucum, immaculatum, apicibus foliorum inæqualiter distinctis, supra planis.—*Nuciforme. Nobis in misc. nat. p. 22.—Hort. kew. ed. 2. v. 3. p. 213.*

HABITAT C. B. S. G. H. ♃.
FLORES non vidi.
INTROD. circa 1793.

††† SEMITERETIA, *foliis subquatuor, decussatis, integerrimis, semiteretibus, obtusis, lævigatis; absque punctis papulisve; floribus sessilibus.*

M. (Short white-leav'd) foliis albis subovatis, subtus convexis supra planis, flore sessili — *M. (albis corollis) testiculare; foliis quatuor decussatis supra planis. Hort. kew. ed.* 1. *v.* 2. *p.* 181.; *et ed.* 2. *v.* 3. *p.* 214.—*Nobis in miscel. nat. p.* 24.—*Willd. sp. pl.* 2. *p.* 1026.—Variat. *testiculare.* 8.

α. Corolla (alba?) foliis quatuor latioribus, magis expansis. *Hort. kew. l. c.*
FLORES non vidi.
β. Corolla lutea, foliis minoribus sæpe sex, erectioribus, angustioribus.
FLORET Nov.
γ. Corolla lutea, foliis quatuor longioribus, erectioribus.
FLORET Nov.
δ. Corolla rubicunda, foliis quatuor longioribus, erectioribus. *Jacq. frag. p.* 20. 73. *t.* 12. *f.* 2.
HABITAT C. B. S. G. H. ♃.
FLORES non vidi.
INTROD. 1774.
OBS. I possess the three first varieties, but am uncertain concerning the last, not having seen the flowers.

M. (Cloven White) foliis æqualibus semiteretibus albis.—*M. fissum. Nobis in miscel. nat. p.* 25.—*Hort. kew. ed.* 2. *v.* 3. *p.* 214. *fissum.* 9. *

HABITAT C. B. S. G. H. ♃.
FLORES non vidi.
INTROD. 1776.

obtusum. 10. * M. (Cloven Green) foliis inæqualibus virescentibus semitereti-acinaciformibus obtusis; floribus subsessilibus, calycibus sexlaciniatis.—*Nobis in miscel. nat. p. 25.—Hort. kew. ed. 2. v. 3. p. 214.*
HABITAT C. B. S. G. H. ♃.
FLORET Mar. April.
INTROD. 1792.
OBS. *Flores* (bis solum vidi) solitarios terminales, vix sessiles, A. M. expansos, basi bracteis duabus foliiformibus, magnos, facie ut in M. linguæforme, at laciniis revolutiusculis, longè angustioribus, acutis, emarginatisve, læte rubicundis, basi aliquantillum pallidioribus, plus uncialibus, atque distantioribus quam in plurimis. *Filamenta* erecta, alba, supernè tenuissime rubicunda. *Antheræ* etiam albæ, vel tenuiter flavicantes. *Styli* sex, sursum recurvi, albi, ramentacei. *Calyx* crassus, sexfidus, laciniis subæqualibus, obtusis; in flore aperto refractis, tertiâ secundâque laciniâ, ad latera plus minusve membranaceis.

†††† MONILIFORMIA, *decidua, (æstate aphylla) caudicibus brevissimis moniliformibus: foliis duobus primoribus (seu stipulis) connatis fere ad apices, duobus sequentibus (seu foliis propriis) elongatis, basi conjunctis, marcescenti-deciduis; calycibus foliisve chrystallinis.*

pisiforme. 11. * M. (Pea shaped) foliis papuloso-chrystallinis, primoribus connato-pisiformibus s. sphæroideis, sequentibus semiteretibus, caudice ra-

mosissimo suberoso, unciali.—*M. pisiforme. Nobis in miscel. nat. p.* 23.
HABITAT C. B. S. G. H. ♃. s. ♄.
FLORES non vidi.
INTROD. ante 1796.
OBS. I am afraid this most extraordinary and most distinct species is totally lost to our gardens. I first found it in the collection of the Earl of Tankerville.

M. (Necklace) foliis primoribus connato-sphæroideis, sequentibus semiteretibus subulatis longissimis recurvantibus.—*Nobis in miscel. nat. p.* 24.—*Hort. kew. ed.* 2. *v.* 3. *p.* 213. *moniliforme.* 12. ■
HABITAT C. B. S. G. H. ♄.
FLORET Apr.
INTROD. ante 1794.
OBS. Flores niveos, ter solum produxi.

††††† SUBULATA. *Acaulia, foliis semiteretibus subulatis viridibus absque papulis, supernè triquetris; floribus pedunculatis rubicundis.*

M. (Great Awl-leav'd) acaule, foliis subulatis acutis viridibus, apice triquetris, corolla rubicunda.—*M. acutum. Nobis in miscel. nat. p.* 26.—*Hort. kew. ed.* 2. *v.* 3. *p.* 215. *acutum.* 13. *
HABITAT C. B. S. G. H. ♃.
FLORET Nov.—et Apr. A. M.
INTROD. ante 1793.

M. (Daisy-flower'd) foliis viridibus triquetris apice trifariam denticulatis.—*Mesemb. acaule, foliis triquetris linearibus impunctatis apice trifariam dentatis. Linn. sp. pl.* 690.—*Willd. sp. pl. tom.* 2. *p.* 1029.—*Hort. kew. ed.* 2. *v.* 3. *p.* 217.—*Nobis in misc. nat. p.* 30.— *Bellidiflorum.* 14.

Dillen. elth. 224. *f.* 233.—*Bradl. succ.* 2. *p.* 9. *f.* 18.
Habitat C. B. S. G. H. ♃.
Floret Oct.—Dec.
Cult. 1717.
Obs. An recte hujus divisionis?

subulatum. 15. † M. (Pale Daisy-flower'd) acaule, foliis subulatis triquetris dorso supernè serratis.—*M. subulatum. Mill. dict. ed.* 8. *no.* 10.—*M. Bellidiflorum* B. *simplex, foliis latere infero tantum apice dentatis. Plant. grass. cum icone.*
Habitat ad Caput Bonæ Spei. G. H. ♃.
Floret ....
Cult. 1768.
Obs. Nondum vidi.

†††††† Calamiformia. *Acaulia, subacaulia ve, foliis teretiusculis, seu calamiformibus, absque papulis.*

calamiforme. 16. M. (Quill-shap'd) foliis subulatis teretiusculis glaucescentibus punctulatis basi supra planis, floribus octogynis.—*M. calamiforme Linn. sp. pl.* 690.—*Willd. sp. pl.* 2. *p.* 1031.—*Hort. kew. ed.* 2. *v.* 3. *p.* 215.—*Nobis in miscel. nat. p.* 26.—*Plant. grass. cum icone.* —*Dill. elth. t.* 186. *f.* 228.—*Ficoides capensis humilis cæpifolio flore stramineo. Bradl. succ.* 2. *p.* 10. *f.* 19.
Habitat C. B. S. G. H. ♃.
Floret Jul.—Sept.
Cult. 1717.

obsubulatum. 17. * M. (Reverse-quill'd) acaule, foliis obsubulatis, seu subclavatis crassis teretiusculis punctulatis virescentibus obtusis. *Nobis in miscel. nat. p.* 27.

HABITAT C. B. S. G. H. ♄.
FLORES non vidi.
INTROD. circa 1796.

M. (Turgid-quill) foliis triquetro-teretibus farctis percrassis virescentibus punctatis biuncialibus. *Nobis in miscel. nat p.* 27.—*Hort. kew. ed.* 2. *v.* 3. *p* 215.—*M punctatum. Nobis mesemb. append.* 2. *p.* 411. *teretiusculum.* 18. *

HABITAT C. B. S. G. H. ♃.
FLORES non vidi.
INTROD. ante 1794.

M. (Cylindric-quill) foliis triquetro-cylindricis glaucis punctatis triuncialibus, junioribus glaucioribus subinde triquetris; cauliculo senecto biunciali confertim ramoso.—*M. cylindricum* α. *Nobis in misc. nat. p.* 27.—*M. cylindricum. Hort. kew. ed.* 2. *v.* 3. *p.* 215. *cylindricum.* 19. *

HABITAT C. B. S. G. H. ♃.
FLORET Sept. et Feb. A. M.
INTROD. ante 1794.

OBS. *Flores* terminales solitarii. *Pedunculi* 1-2-unciales subgraciles inferne compressi, superne teretes, medio vel supra medium bibracteati. *Bracteæ* magnæ foliiformes florem superantes. *Calyx* inæqualiter quadrifidus, laciniis foliiformibus, duabus fere triplo-minoribus basi altè membranaceis, omnibus obtusissimis teretibus, at parum subulatis. *Corolla* laciniis numerosis imbricatis obtusis integris, altitudine laciniarum maximarum calycis, saturatissime rubicundis, nitidissimis. *Filamenta* numerosa rosea, corolla breviora. *Antheræ* fuscæ. *Pollen* album. *Styli* de-

cem ad duodecim, breves exigui, demum patuli, albo-virides parabolico-acuminati.

Obs. Post florescentiam, corollæ laciniæ persistentes exsiccatæ, styli longi flexo-expansi apice recurvi subalbi ramentacei.

teretifolium. 20. * M. (Round-quill) foliis quadriuncialibus subpunctatis virescentibus, cylindricis teretiusculisve, junioribus politis perviridibus semiteretibus; caulibus senectis semipedalibus, cortice lævigato.—*M. cylindricum* β. *Nobis in miscel. nat. p.* 27.

Habitat C. B. S. G. H. ♄. s. ♃.

Floret Sept. et Ap. A. M.

Introd. ante 1794.

Obs. *Flores* primo terminales solitarii magni, in ramis procumbentibus crassis sub-dodrantalibus. *Pedunculi* biunciales flexi teretiusculi superne vel infra medium bibracteati. *Bracteæ* foliiformes. *Calyx* quadrifidus laciniis crassis inæqualibus foliiformibus, duabus minoribus altè membranaceis. *Corolla* formosa laciniis numerosis imbricatis latiusculis, sæpe emarginatis, saturate rubicundis, basi albis. *Filamenta* pallida. *Antheræ* sæpe purpurascentes. *Germen* viride. *Styli* circiter duodecim albi, in senecto flore recurvatim stellati, sublanceolati cuspidati.

Obs. This and the two last may perhaps not be specifically distinct. The leaves of *teretiusculum* are the shortest; those of *cylindricum* are thicker and more glaucous, and less cylindric than in *teretifolium*, which last has also by far the longest and smoothest stems.

M. (Finger-leav'd) subacaule, foliis alternis te- *digita-*
retibus obtusis, floribus axillaribus sessilibus. *tum.*
Hort. kew. ed. 1. *v.* 2. *p.* 181.; *et ed.* 2. 21.
v. 3. *p.* 215.—*Nobis in misc. nat. p.* 27.— †
Willd. sp. pl. 2. *p.* 1031.

HABITAT C. B. S. G. H. ♄.

FLORET ....

INTROD. 1775.

OBS. Nondum vidi. An ritè hujus divisionis?

††††††† ROSTRATA. *Acaulia seu subacaulia, foliis* 4—6 *suberectis glaucis, punctatis absque papulis, semiteretibus, apice triquetris; floribus luteis.*

M. (robust Beak'd) foliis subulatis obtusis *robus-*
punctatis, basi interiore pustulato-gibbosis, *tum.*
caule robusto ramuloso. *Nobis in miscel.* 22.
nat. p. 28.—*Hort. kew. ed.* 2. *v.* 3. *p.* 216. *

HABITAT C. B. S. G. H. ♄.

FLORES non vidi.

INTROD. 1795.

M. (Compact) acaule, foliis connatis punctatis *compac-*
semiteretibus apice triquetris subreflexis acu- *tum.*
tis, floribus sessilibus, calyce subcylindraceo 23.
sexfido: corollis luteis. *Hort. kew. ed.* 1. †
v. 2. *p.* 191; *et ed.* 2. *v.* 3. *p.* 214.—*Nobis in misc. nat. p.* 25.

HABITAT C. B. S. G. H. ♃. seu ♄.

FLORET Nov.

INTROD. 1780.

OBS. Not having yet met with *M. compactum*, either at Kew or any where else, and finding that the above character of it agrees pretty well with my description of *M. robustum*, I am inclined to think they may be the same;

although I have not seen the flowers of the latter, which would decide the matter. Even the location of *M. compactum* in Hort. Kew. page 191, immediately following its closest ally in that work, *M. rostratum*, ought very strongly to favour such an idea, did we not see a few pages before the flat-leav'd *M. expansum* placed between *M. umbellatum* and *M. testiculare*; from both of which *M. expansum* recedes as far as possible. Many years ago, when Mr. Donn of Cambridge saw a plant of *M. canum* (a species somewhat like *M. robustum*) with me, he said he thought it was *M. compactum* of Kew Garden; in this however he was mistaken, as the descriptions will clearly shew; but his idea of *M. compactum* helps also to shew that it may be the same as *M. robustum*, or at least that it greatly resembles that species. It is impossible now to clear up this point.

quadrifidum. 24. * M. (quadrifid Beak'd) subacaule, foliis subulatis obtusis glaucis, punctis rarissimis, calyce quadrifido. *Nobis in misc. nat. p.* 28.—*Hort. kew. ed.* 2. *v.* 3. *p.* 216.

HABITAT C. B. S. G. H. ♃. s. ♄.

FLORET Nov.

INTROD. 1795.

OBS. Præcedenti simile sed minus, foliis obtusioribus minusque punctatis. *Miscel. nat. l. c.*

bifidum. 25. * M. (bifid Beak'd) subacaule, foliis subulatis glaucis obtusis multi-punctatis, calyce 2—4-fido.—*M. bifidum. Nobis in misc. nat. p.* 29.—*Hort. kew. ed.* 2. *v.* 3. *p.* 216.

Habitat C. B. S. G. H. ♃.
Floret Mar. et Nov.
Cult. 1795.
Obs. Flores duos solum vidi, alterum descriptum in *Miscel. nat. l. c.*—alterum in horto, Mar. 1807, *calyce* quadrifido, laciniis duabus exterioribus maximis foliiformibus punctatis, alterâ mucronatâ; interioribus duabus longissime brevioribus et fere omnino membranaceis flaccidisque: *petalis* luteis A. M. expansis, sublongitudine laciniarum exteriorum calycis: *staminibus* brevioribus quam laciniarum interiorum calycis, non convergentibus: *antheris* albicantibus *stylos* superantibus: *stylis* circiter novem robustis obtusis incurvantibus ramentaceis.

M. (double-bracted Beak) subacaule, ramosum, foliis elongatis subulatis semiteretibus punctatis perglaucis; bracteis quatuor decussatis scapo brevioribus. *bibracteatum.* 26. *
Habitat C. B. S. G. H. ♃. s. ♄.
Floret Apr. et Nov.
Introd. circa 1803.
Communicavit Dom. Ross.
Obs. M. rostrato simillimum, at paulò robustius, *caule* senecto unciali ramoso præcedentium. *Folia* glauciora quam in M. rostrato, punctis paucioribus majoribus. *Scapus* altior, seu 4-5-uncialis, *bracteis* scapo semper multo brevioribus, nec longioribus ut in M. rostrato. Præterea *calyx* sæpissime 5- nec semper 4-fidus. *Petala* lutea, vespere clausa, graciliora longioraque quàm in illo. Demum *stamina* longiora non abscondita. Denique *styli* decem nec octo, longitudine filamento-

rum (post florescentiam filamentis multo longiores) subulati erecti, valde ramentacei, apicibus patulis, nec brevissimi, arcteque incurvi ut in M. rostrato.

rostratum. 27. M. (Heron-beak'd) acaule foliis elongatis subulatis semiteretibus acutis glaucis præpunctatis; bracteis duabus scapo longioribus.—*M. rostratum. Willd. sp. pl.* 2. 1027.—*Hort. kew. ed.* 2. *v.* 3. *p.* 217 —*Nobis in misc. nat. p.* 29.—*M. (tuberculatum) acaule foliis semicylindricis connatis externe tuberculatis. Mill. dict. ed.* 8. *no* 32.—*M. (rostratum) acaule, foliis semicylindricis connatis externe tuberculatis. Mill. dict. ed.* 8. *no.* 40. *excluso synonymo Martyni, quod ad M. felinum pertinet.—M. rostratum rostrum ardeæ referens. Dill. elth.* 240. *f.* 229. *sine flore.*

HABITAT C. B. S. G. H. ♃.

FLORET fine Apr.

CULT. 1732.

OBS. *Folia* fere radicalia, decussata altè connata semi-cylindrica, supernè triquetra; juniora punctis subprominentibus, et ad angulorum apices scabra. *Floret* tandem sæpius. *Scapi* solitarii primo fere terminales, deinde vero axillares teretes virescentes rugulosi triunciales; superne vix manifestè incrassati; basi bibracteati. *Bracteæ* folia omnino simulantes, et similariter altè connatæ, scapos semper superantes. *Calyx* subglobularis quadrifidus, laciniis duabus exterioribus foliiformibus patulis circiter altitudinem petalorum; duabus interioribus multoties minoribus, et ad latera valde membranaceis, apicibus ipsis solum foliaceis. *Petala* lutea et per diem supernè re-

curvantia, infernè arctè erecta, subulata, brevia et latiuscula in hoc genere, ad solem pulchrè splendentia. *Stamina* obcondita brevia convergentia alba. *Antheræ* pallidæ. *Styli* perbreves sed crassi, arctè incurvi, *filamentis* longe breviores, marginibus aliquantulum ramentaceis. *Germen* non examinavi.

M. (small Heron-beak'd) foliis subulatis obtusis punctatis, basi interne pustulato-gibbosis, senioribus expansis, caule triunciali prostrato ramoso.—*M. ramulosum. Nobis in miscel. nat. p.* 29.—*Hort. kew. ed.* 2. *v.* 3. *p.* 217. *ramulosum.* 28. *

HABITAT C. B. S. G. H. ♄.
FLORET Mar. et Nov. A. M.
INTROD. 1791.
OBS. *Styli* novem, filamentorum altitudine post fœcundationem, superne revoluti, interne ramentacei.

M. (tooth Beak'd) foliis subulato-triquetris compressis perglaucis, apice subtus dilatato-carinatis sæpeque denticulatis. *Nobis in miscel. nat. p.* 30.—*Hort. kew. ed.* 2. *v.* 3. *p.* 217. *denticulatum.* 29. *

HABITAT C. B. S. G. H. ♃.
FLORET Apr. P. M.
INTROD. 1793.
OBS. Paulo variat.
α. M. denticulatum, canum. *Misc. nat. l. c.*
β. M. denticulatum, glaucum. *Misc. nat. l. c.*
OBS. Floret fine Apr.—Merid. et Pomerid. *Florem* solitarium solum vidi. *Scapus* primo terminalis mox lateralis, trientalis et ultra, basi ipso *bracteis* duabus foliiformibus bidenticulatis. *Calyx* quinquefidus, laciniis longè parabolicis, magis æqualibus quam in plurimis,

tribus plus minus membranaceis. *Corolla* triuncialis, laciniis angustis acutis, vel rarius apice bifidis, pallide stramineis, at basin versus altè niveis, extus supernè pallidissimè roseis, nitidissimis præcipue internè. *Stamina* numerosa expansa nivea trilinearia, exteriora erecto-patula; interiora conferta. *Antheræ* stramineæ non nitentes. *Styli* circiter 15, breves subulati ramentacei, intra filamenta omnino reconditi, conniventes luteo-virides. *Germen* non examinavi.

γ. M. denticulatum candidissimum.—*Misc. nat. l. c.*

†††††††† Ringentia. *Foliis triquetris supernè sensim incrassatis, sive gibbosis, (excepto penultimo) ciliato-dentatis (2-3 exceptis) absque papulis punctisve; floribus luteis, pomeridianis.*

tigrinum. 30. * M. (Tyger-chap) acaule, foliis glaucescentibus albo-maculatis rarius tuberculatis, marginibus profunde ciliatis. *Nobis in miscel. nat. p.* 31.—*Hort. kew. ed.* 2. *v.* 3. *p.* 218.—*Willd. sp. pl. tom.* 2. *p.* 1029.

Habitat C. B. S. G. H. ♃.

Floret Nov. P. M.

Introd. circa 1790.

felinum. 31. * M. (Cat-chap) acaule, foliis glaucescentibus, marginibus ciliato-dentatis, apicibus cartilagineis. *Nobis in misc. nat. p.* 31.—*Willd. sp. pl.* 2. *p.* 1023.—*Hort. kew. ed.* 2. *v.* 3. *p.* 218.—*Mart. cant.* 30. 6. 30.—*M. rictum felinum representans. Dill. elth.* 240. *f.* 220.

Habitat C. B. S. G. H. ♃.

Floret Nov. P M.
Cult. 1730.

M. (Mouse chap) subacaule, foliis glaucis punctatis trifariam ciliato-denticulatis. *Nobis in misc. nat. p.* 30.—*Hort. kew. ed.* 2. *v.* 3. *p.* 217.—*Willd. sp. pl.* 2. *p.* 1029. *murinum.* 32. *
Habitat C. B. S. G. H. ♄.
Floret Sept. P. M.
Introd. circa 1790.
Obs. Styli 5 brevissimi erecti virides apicem versus paulo incrassati.

M. (Dog-chap) subacaule, foliis impunctatis glaucis, apicem versus bracteisque denticulatis incurvantibus; pedunculis longitudine foliorum.—*M. caninum, α. Nobis in misc. nat. p.* 31.—*M. ringens, α, caninum. Linn. sp. pl.* 698.—*Willd. sp. pl* 2. *p.* 1023.—*Plant. grass. cum icone.*—*Hort. kew. ed.* 2. *v.* 3. *p.* 218.—*M. rictum caninum referens. Dill. elth.* 241. *f.* 231.—*Ficoides capensis humilis, folio triangulari prope summitatem dentato, flore luteo. Bradl. succ. f.* 17. *caninum.* 33.
Habitat C. B. S. G. H. ♄.
Floret Aug.—Oct. P. M.
Cult. 1717.
Obs. The flowers of this fine species expand in the afternoon, and close again about the hour those of *M. dolabriforme* begin to open; which last are remarkable for closing when the flowers of the fragrant *M. noctiflorum* and its allies commence their expansion for the night. *Misc. nat. l. c.*

M. (Fox-chap) subacaule, foliis impunctatis glaucis apicem versus grandidentatis integrisve, senectis horizontalibus, bracteis in- *vulpinum.* 34. *

tegris, pedunculis folio longioribus.—*M. caninum β. Vulpinum. Nobis in misc. nat. p.* 32.
HABITAT C. B. S. G. H. ♄.
FLORET Aug.—Oct. P. M.
INTROD. circa 1795.
OBS. Præcedenti simillimum at elatius, foliis longioribus gracilioribus magis expansis, et aliquantillum viridioribus, dentibus paucioribus.

hybridum. 35. * M. (Bastard) foliis perglaucis semiteretibus integris supernè incrassatis, carinatis, mucronulo recurvo. G. H. ♃.
OBS. Casualiter hybridum, inter M. caninum et M. albidum, a seminibus M. albidi, ortum, in horto amici Dom. Howard, qui communicavit circa 1808. *Folia* primi anni sæpius dente uno alterove instructa, sequentia omnino integerrima. *Flores* non vidi.—M. vulpino simillimum, at magis album, et absque dentibus—M. albido minus simile; nempe folia minus alba, et supernè nec infernè, gradatim incrassata.

albidum. 36. M. (White) foliis subulatis triquetris peralbis: basi semiteretibus; apice obtusis cum mucrone.—*M. albidum. Willd. sp. pl.* 2. *p.* 1029. —*Hort. kew. ed.* 2. *v.* 3. *p.* 216.—*Mesembr. foliis robustis albicantibus. Dill. elth. t.* 189. *f.* 232.—*Ficoides afra folio triangulari ensiformi, glauco crasso, flore amplo aureo. Bradl. succ. t.* 43.
HABITAT C. B. S. G. H. ♃.
FLORET Jul. Aug.
CULT. 1714.

M. (Hoary) foliis subcanescentibus triquetris, compressis basi attenuatis, apicem versus gibboso-carinatis. *Nobis in misc. nat. p.* 25. *canum.* 37. *

HABITAT C. B. S. G. H. ♃.

INTROD. 1795.

FLORES non vidi.

††††††††† DOLABRIFORMIA. *Foliis decussatis dolabriformibus, caule fruticuloso, floribus luteis pomeridianis seu vespertinis.*

M. (Hatchet-leav'd) subcaulescens, foliis dolabriformibus, triquetrisve carina apicem versus valde dilatata.—*M. dolabriforme. Willd. sp. pl.* 2. *p.* 1030.—*Hort. kew. ed.* 2. *v.* 3. *p.* 221.—*Nobis in misc. nat. p.* 37.—*Curt. bot. magaz. f.* 32.—*Plant. grass. cum icone.* —*Mesemb. folio dolabriformi. Dill. elth. t.* 191. *f.* 237. *dolabriforme.* 38.

HABITAT C. B. S. G. H. ♄.

FLORET Mai.—Nov. P. M. seu vespere.

CULT. 1705.

β. Paulo minus omni parte, foliis certe minus gibbosis.

OBS. The stature of this anomalous species, and colour of its flowers, and the period of their expansion, should seem to fix its place in the genus between the RINGENTIA and LINGUÆFORMIA.

†††††††††† LINGUÆFORMIA. *Foliis plus minusve linguæformibus mollibus, lucidis, supra planis, subtus convexis, apicem versus sæpius oblique gibbosis, uncinatisve: floribus solitariis magnis lucide luteis, petalis in hoc genere latissimis.*

+ DISTICHA, *foliis distichis.*

scalpratum. 39. * M. (Great-tongue) prostratum, foliis declivissimis scalpratiformibus latissimis altero margine crassiori, basi intus cartilagineo-gibbosis, calycibus glaberrimis sessilibus, petalis apice crenulatis. *Nobis in misc. nat. p. 32.—Hort. kew. ed. 2. v. 3. p. 218.—M. linguæforme, α. Willd. sp. pl. 2. p. 1026.—Mesemb. folio scalprato. Dill. elth. 235. f. 224.*

HABITAT C. B. S. G. H. ♃.

FLORET Aug.—Nov.

CULT. 1714.

latum. 40. * M. (Broad-tongue) prostratum, foliis latè linguæformibus obtusissimis perviridibus humi depressis, floribus subsessilibus. *Nobis in misc. nat. p. 32.—Willd. sp. pl. 2. p. 1026, excluso synonymo Boerhavii.—Hort. kew. ed. 2. v. 3. p. 219.—Mesemb. folio linguæforme latiore. Dill. elth. 236. f. 225?*

HABITAT C. B. S. G. H. ♃.

FLORET Aug.—Nov. A.M.

CULT. 1732.

adscendens. 41. * M. (ascending Broad-tongue) adscendens, foliis latè linguæformibus obtusissimis viridibus adscendentibus, floribus pedunculatis.

HABITAT C. B. S. G. H. ♃.

FLORET Aug.—Nov.

CULT. ante 1805.

OBS. The leaves are more ascending, and paler than in the last, and the peduncles longer.

OBS. If the next species but three is not the *M. folio linguiformi longiore* of Dillenius, this may be it: but if so, he has delineated the leaves too long.

M. (Depressed Tongue) prostratum, foliis linguæformibus obtusis revoluto-depressis pallide viridibus, apice varie incurvis.—*M. depressum. Nobis in misc. nat.* p. 33.—*Hort. kew. ed.* 2. *v.* 3. *p.* 218.—*M. folio linguiformi angustiore. Dill. elth.* 237. *f.* 226. *depressum.* 42. *

Habitat C. B. S. G. H. ♃.

Floret Sept.—Nov. at rarissimè.

Cult. 1795.

Obs. I am now satisfied the above synonym of Dillenius belongs to the present, and not the following article.

M. (rufescent Tongue) prostratum, foliis linguæformibus obtusis arctissime imbricatis, planis subdeclivis rufescentibus, quasi subundulatis, apice varie incurvis. *rufescens.* 43. *

Habitat C. B. S? G. H. ♃.

Floret ....

Cult. ante 1804.

Obs. Præcedenti simillimum, at rufescens, foliis planis humi depressis; sed non recurvis vel revolutis. Rarissimè floret, et fere sterile.—Communicavit Dom. Howard.

M. (common Tongue) adscendens, foliis inæqualiter linguæformibus adscendentibus, perviridibus subinde carinatis. *Nobis in misc. nat. p.* 33.—*Hort. kew. ed.* 2. *v.* 3. *p.* 218.—*M. obliquum. Willd. sp. pl.* 2. *p.* 1027. *linguæforme.* 44.

Habitat C. B. S. G. H. ♃.

Floret Nov.—Mar. A. M.

Cult. 1732.

M. (long Tongue) subprostratum, foliis linguæformibus longissimis declivis, pedunculis calyce longioribus, petalis acutis. *Nobis in misc. nat. p.* 34.—*Willd. sp. pl.* 2. *p.* 1027. *longum.* 45. *

—Hort. kew. ed. 2. v. 3. p. 219.—Plant. grass. cum icone?—M. folio linguæformi longiore. Dill. elth. 238. f. 227?—Ficoides afric. acaulos. foliis latissimis crassissimis, lucidis, conjugatis, brevioribus flore, aureo amplo, Pedunculo brevi. Bradl. succ. tab. 24?

HABITAT C. B. S. G. H. ♃.

FLORET Aug.—Oct. A. M.

CULT. 1725.

β. (flaccidum) foliis linguæformibus longissimis flaccidis, humi reclinatis seu fere adpressis declivis, pedunculo calyce longiore.

OBS. Folia longiora, et certe flaccidiora, quam in præcedentibus.

OBS. 2. This species has its leaves with one edge pointing more to the ground, and the other more ascending than usual in this subdivision, except in M. scalpratum, whose edges are nearly perpendicular with the horizon, in old woody plants.

angustum. 46. * M. (narrow Tongue) foliis lineari-linguæformibus semicylindricis longissimis. *Nobis in misc. nat. p. 34.—Hort. kew. ed. 2. v. 3. p. 220.*

HABITAT C. B. S. G. H. ♃. s. ♄.

FLORET Mar. et Oct. A. M.

INTROD. circa 1790.

†† CRUCIATA *foliis longissimis, rarius exacte, sed sæpius oblique cruciatis mollissimis, corollis magnis lucide luteis.*

præpingue. 47. * M. (Soft-tongue) foliis linguæformibus mollissimis, junioribus ciliato-pubescentibus, apice incurvis, caule senecto semipedali procumbente crasso.—*M. præpingue. Nobis in*

misc. nat. p. 35.—*Hort. kew. ed.* 2. *v.* 3. *p.* 220.—*M. heterophyllum. Bot. rep. v.* 8. 540?

Habitat C. B. S. G. H. ♃.

Floret Aug.—Oct. A. M.

Introd. 1792.

Obs. The second edition of Hortus Kewensis cites the above figure of *Bot. repos.* (described I believe by the late Mr. Geo. Jackson) for this species, but it rather belongs to the last, and has nothing to do with my *M. heterophyllum;* which indeed is not even hinted at by the writer, lest his pirated account from my Miscellanea (p. 101, &c.), of the opening and closing of the ripe capsules of Mesembryanthema, and the consequent providential distribution of their seeds, should be exposed. This is like Mr. J.'s asking and obtaining the favour of my telling him where the rare *Agrostis littoralis* grew wild, (at a time when I was the only person who knew a habitat for it;) and soon after giving it to Kew garden, (where it was shown *me* for a rarity,) as a discovery of his own; and also to Sowerby, who figured it in English Botany, as a *discovery* of Mr. J.'s; notwithstanding I had given specimens, and even a written new specific character of it to Sowerby himself, above a year before! Not so Mr. Knapp, who, wanting it for his large work on British Grasses, also applied to me for its place of growth; where he found it; and has becomingly acknowledged who enabled him to do so.

taurinum. 48. * M. (Bull's-horn) foliis bifariis oblique cruciatis semiteretibus obtusis crassissimis lutescente-viridibus incurvatis: caudice basi ramoso semipedali.

HABITAT C. B. S. G. H. ♄.

FLORET Sept.—Nov.

INTROD. circa 1795.

OBS. Facies M. cruciati, at longè majus. *Folia* minus cruciata, pallidiora, et certo situ quasi pallido-maculata, sæpe subdigitiformia, et fere magnitudine digiti, at supra magis plana; apicibus sæpe obliquis; juniora semper incurva et cornua taurorum simulantia. *Flos* luteus sessilis. *Calyx* verè bifidus! laciniis inæqualiter membranaceis, carinatisque, membranis plus minusve exustis. *Styli* octo ramentacei. Cætera ut in affinibus.

Communicavit amicus Dom. Howard.

cruciatum. 49. * M. (Cruciate-tongue) foliis lineari-linguæformibus semicylindricis mollissimis cruciatis, caule senecto trientali.—*M. cruciatum. Nobis in misc. nat. p.* 35.—*Hort. kew. ed.* 2. *v.* 3. *p.* 220.

HABITAT C. B. S. G. H. ♄.

FLORET Mai.—Nov.

INTROD. 1792.

OBS. According to the second edition of the Hortus Kewensis, this species was introduced into the English gardens in 1792. But as it has been a very old inhabitant of Chelsea Physic Garden, I conceive its introduction must have been much earlier: and as it is described by Boerhaave, it was probably sent by him to Miller above half a century since.

M. (Deform'd-tongue) foliis lineari-linguæformibus semicylindricis oblique cruciatis, apicibus deformibus, caule senecto ramoso semipedali.—*M. difforme. Willd. sp. pl.* 2. *p.* 1031.—*Hort. kew. ed.* 2. *v.* 3. *p.* 220.—*Nobis in misc. nat. p.* 35.—*M. foliis difformibus, flore luteo. Dill. elth.* 25. *f.* 242; *nec* 241, *quæ ad M. semicylindricum pertinet, cum synonymo Pluknetiano.* *difforme.* 50.

HABITAT C. B. S. G. H. ♄.
FLORET Mai.—Nov. A. M.
CULT. ante 1732.

M. (Semicylindric-tongue) foliis semiteretibus, apicem versus obliquis et uno alterove dente munitis, caule ramoso adscendente semipedali.—*M. semicylindricum. Nobis in misc. nat. p.* 36.—*Hort. kew. ed.* 2. *v.* 3. *p.* 220.—*M. foliis difformibus flore luteo. Dill. elth.* 252. *f.* 241, *nec* 242, *quæ ad ultimum pertinet.*—*Pluk. mantiss. t.* 325. *f.* 4. *semicylindricum.* 51. *

HABITAT C. B. S. G. H. ♄.
FLORET Mai.—Nov.
CULT. ante 1732.

M. (Various-leav'd) acaule, foliis viridibus impunctatis difformibus, superioribus longioribus. *Nobis in misc. nat. p.* 36. *heterophyllum.* 52. *

HABITAT C. B. S. G. H. ♃.
FLORES non vidi.
INTROD. 1795.
OBS. Singularis est et distinctissima species. *Folia* robusta difformia; inferiora ut in M. cano, superiora fere ut in M. difforme, at minora. *Misc. nat. l. c.*

†††††††††† Gibbosa. *Foliis difformibus prægrossis uncialibus oppositis sæpius lucidis fere ad medium connatis, uno gibboso abbreviato, altero apice peraucto et obliquo: calycibus sæpe sexfidis: corollis rubicundis parvulis hyemalibus, seu primo vere.*

gibbosum. 53. * M. (short Gibbous) subacaule, foliis lutescente-viridibus patentibus ovatis semicylindricis, apice rarissime carinatis. *Nobis in misc. nat. p. 36.—Hort. kew. ed. 2. v. 3. p. 221.*

Habitat C. B. S. G. H. ♃.

Floret Jan.—Apr.

Introd. ante 1780.

luteo-viride. 54. * M. (yellow-green Gibbous) cauliculo prostrato debili 2-3 unciali, foliis oblongis semicylindricis supernè triquetris luteo-viridibus.—*Mesemb. (perviride) β. Caule senecto biunciali, foliis majoribus longioribusque, luteo-viridibus. Nobis in misc. nat. p. 37.*

Obs. *Flores* terminales sessiles solitarii. *Calyx* basi anceps, sexfidus, laciniis duabus exterioribus majoribus carinatis obtusis; cæteris planis subovatis retusis, membranis purpurascentibus circumactis. *Corolla* fere ut in *M. perviride*, petalis numerosis, basi aliquantulum imbricatis latiusculis, seu cuneato-linearibus, sæpe emarginatis, pallide rubicundis, costá saturatiore, lateribus basi albicantibus. *Filamenta* alba expansa, petalis fere triplo breviora. *Antheræ* sulphurascentes. *Styli* sex valde ramentacei, demum patentes at brevissimi, et filamentis multo breviores.

HABITAT C. B. S. G. H. ♃. s. ♄.
FLORET Jan.
INTROD. circa 1795.

M. (dark-green Gibbous) cauliculo prostrato debili 3-4-unciali, foliis subovatis vel semicylindrico-triquetris perviridibus. *M. (perviride) subacaule, foliis oblongis semicylindrico-triquetris, caule brevi prostrato. Nobis in misc. nat. p. 37.—Hort. kew. ed. 2. v. 3. p. 221.* *perviride.* 55. *

HABITAT C. B. S. G. H. ♃. seu potius ♄.
FLORET Jan.—Mar.
INTROD. 1792.
OBS. *Folia* breviora et forte crassiora quam in præcedente.

M. (downy Gibbous) cauliculo senecto triunciali debili prostrato, foliis semicylindricis pubescenti-canis, apicibus obliquis.—*M. pubescens. Nobis in misc. nat. p. 37.—Hort. kew. ed. 2. v. 3. p. 221.* *pubescens.* 56. *
OBS. Præcedenti simillimum. *Folia* canescentia, sive potius sericea, oculo armato pubescentia.
HABITAT C. B. S. G. H. ♃. vel potius ♄.
FLORES non vidi.
INTROD. 1792.

** CAPITATA. *Foliis imbricato-capitatis densissimis alternis longissimis absque papulis punctisve; caudice erecto demum decumbente; petalis angustissimis, a basi ad medium ciliatis; stylis numerosis; germinibus depressis.*

elongatum. 57. * M. (dwarf Tuberous) foliis capitatis obtuse triquetris subspithameis marcescenti-deciduis; petalis longissimis pube longo flexuoso ciliatis; radice magno tuberoso.—*M. elongatum. Nobis in misc. nat. p.* 40.—*Hort. kew. ed.* 2. *v.* 3. *p.* 223.

HABITAT ad Caput Bonæ Spei. G. H. ♄.

FLORET Mai. rarissime, P. M.

INTROD. circa 1793.

OBS. *Corolla* omnium maxima, seu quincuncialis et ultra, speciosissima, odore hircino; *petalis* in seriebus plurimis angustissimis acutissimis et fere capillaceis, splendide sulphureis, a basi ad medium ciliatis. *Styli* 19, apicibus recurvis. *Misc. nat. l. c.*

capitatum. 58. * M. (short Dagger-leav'd) foliis æquilateri-triquetris glaucescentibus, membranis calycinis pallidis; petalis luteis longitudine calycis, exterioribus purpurascentibus; stylis strictis setaceis. *Nobis in misc. nat. p.* 41.—*Hort. kew. ed.* 2. *v.* 3. *p.* 223.—*Ficoides Capensis Caryophylli folio, flore aureo specioso. Bradl. succ.* 2. 5. *t.* 14.—*Astero Aizoide Capo di Buona Speranza. Zan. it. bot. p.* 35. *t.* 13.

HABITAT C. B. S. G. H. ♂. s. ♄.

FLORET Jul.—Sept. A. M. pulcherrimè.

CULT. 1717.

pugioniforme. 59. M. (long Dagger-leav'd) foliis compresso-triquetris glaucis; membranis calycinis exustis, petalis stramineis, calyce brevioribus; stylis expansis lineari-lanceolatis. *Nobis in misc. nat. p.* 42.—*Hort. kew. ed.* 2. *v.* 3. *p.* 223. —*Plant. grass. cum icone.*

HABITAT C. B. S. G. H. ♄.

Floret Jul.—Sept. A. M. pulcherrimè.
Cult. 1714.
Obs. This is a larger species than the preceding, having longer and more glaucous leaves, but not larger flowers. It is little better than biennial, and incapable of sustaining itself erect. But *capitatum* is quite upright (when not overdrawn by a hothouse), and lives near eight or nine years in the greenhouse; and its flowers last rather longer in bloom than those of *pugioniforme*.

*** Prostrata. *Caudice senecto perbrevi strumoso; caulibus prostratis subnodosis fere sarmentiformibus; foliis capitato-confertis ad nodos, elongatis, aliquantillum rugulosis, absque papulis; petalis (uno except.) utrinque, vel intus luteis; stylis numerosis,* 19-20; *germinibus depressis.*

M. (Leathery-stalk'd) foliis capitato-confertissimis semicylindrico-triquetris elongatis recurvis subglaucis; caulibus senectis teretiusculis gracilibus dealbatis. *M. loreum. Dill. elth. t.* 200. *f.* 255 *(nec aliorum)—Nobis in misc. nat. p.* 38.—*Hort. kew. ed.* 2. *v.* 3. *p.* 222. ***loreum.*** 60.
Habitat C. B. S. G. H. ♄.
Floret Sept. at rarissimè.
Cult. ante 1732.
Obs. *Flores* terminales solitarii. *Pedunculi* sesquiunciales teretes, æquali crassitie, basin versus bracteis duabus foliiformibus recurvis instructi. *Calyx* ut in *M. dubio*, profundè 5-6-fidus tuberculatus, laciniis subæqualibus, duabus simplicibus seu planis, cæteris membranâ rubro-punctatâ. *Petala* fere ut in M.

dubio. *Filamenta antheræque* pallidæ. *Styli* circiter sexdecim radiatim depressi ramentacei, sordidè lutei. *Germen* hæmisphæricum.

β. (*congestum*) foliis capitato-confertissimis elongatis triquetris rugosulis viridibus longitudine variis, imis per paria longissimis.

Obs. Majus et viride (nec subglaucum). M. diversifolium etiam maximè simulat, sed foliis numerosioribus. Forte propria species. *Flores* non vidi.

Communicavit Dom. Howard circa 1805.

diversifolium. 61. * M. (Short Horn-leav'd) foliis capitato-confertis elongatis triquetro-semicylindricis subrecurvis viridibus, imis per paria longissimis; caulibus angulatis robustis rubro-luteis.—*M. diversifolium. Nobis in miscel. nat. p.* 58.—*Hort. kew. ed.* 2. *v.* 3. *p.* 222.—*Mesemb. corniculatum, foliis brevioribus. Dill. elth. t.* 198. *f.* 252.—*M. corniculatum* β. *Hort. kew. ed.* 1. *v.* 2. *p.* 192.—*Willd. sp. pl.* 2. *p.* 1041.

Habitat C. B. S. G. H. ♃.

Floret Mar.—Oct.

Cult. 1726.

Obs. *Petala* speciosa, integra vel emarginata, intus lucidissimè lutea, extus lineâ longitudinali rubro-purpureâ eleganter notata. *Styli* circiter 17 expansi ramentacei.

diminutum. 62. * M. (Diminished) subacaule, foliis linearibus subulatis obsoletissime triquetris, corolla læte rubicunda. *Nobis in misc. nat. p.* 26.—*Hort. kew. ed.* 2. *v.* 3. *p.* 214.

Habitat C. B. S. G. H. ♃.

Floret Apr.

Introd. ante 1789.

Obs. Grown in a cool Greenhouse, this distinct

species appears to differ from *M. acutum* in nothing but in being three or four times smaller, and its name was given in allusion thereto. But placed in a Hothouse along with *M. acutum*, the latter remains without branches; while the present article acquires short prostrate ones, so extremely according with the present section, that its admittance into it can no longer be denied, notwithstanding its rubicund flower, and now less applicable specific name. Prior to the publication of the Miscellanea, it even went currently, in our best Gardens, by the name of *M. loreum*, which still it is very distinct from. Its calyx, mode of flowering, and nine styles, are all in consonance also with this section.

M. (Dubious Horn-leav'd) foliis subconfertis longiusculis triquetro-semicylindricis adscendentibus viridibus, caulibus teretiusculis luteo-rubris. *Nobis in misc. nat. p.* 39.—*Hort. kew. ed.* 2. *v.* 3. *p.* 222.—*Ficoides africana reptans, folio triangulari, crasso, longissimo flore intus luteo, extus aurantiaco. Bradl. succ. dec* 4. *p.* 18. *t.* 40. *dubium.* 63. *

HABITAT C. B. S. G. H. ♃.

FLORET Mai.—Nov.

CULT. 1800.

OBS. *Folia* breviora minus conferta, minusque recurva, et magis æqualia quam in ultimis. *Calyx* quinquefidus foliolis inæqualibus. *Petala* speciosa intus sulphurea, extus aurantio-rubro notata. *Styli* circiter duodecim.

M. (Long Horn-leav'd) foliis subconfertis triquetro-semicylindricis longissimis glaucis incurvantibus, caulibus valde angulatis, nodis *corniculatum.* 64.

distantibus. *Nobis in misc. nat. p.* 39.—*Hort. kew. ed.* 2. *v.* 3. *p.* 222.—*M. corniculatum*, α. *Hort. kew. ed.* 1. *v.* 2. *p.* 192.—*Willd. sp. pl.* 2. *p.* 1040.—*Plant. grass. cum icone.*—*M. foliis corniculatis longioribus. Dill. elth. t.* 199. *f.* 254.

HABITAT C. B. S. G. H. ♃.

FLORET Mar.—Mai. A. M. rarius.

CULT. ante 1732.

OBS. *Petala* speciosa, latiuscula obtusa emarginata intus splendidè lutea; extus pallidiora, lineà dorsali rubro-purpureâ eleganter notata. *Styli* circiter 13, recurvantes.

tricolorum. 65. * M. (Tricolour'd) foliis exactè cylindricis tripollicaribus acutis viridibus, petalis basi purpureis, stylis viginti.—*M. tricolorum. Nobis in misc. nat. p.* 39.—*Hort. kew. ed.* 2. *v.* 3. *p.* 223.

HABITAT C. B. S. G. H. ♃. s. ♄.

FLORET Oct. Nov. rariùs.

CULT. ante 1794.

OBS. *Corolla* magna pulcherrima, petalis anguste linearibus inæqualibus stramineis nitentibus, basi sanguineo-purpureis. *Antheræ* pulchrè fuscescentes oblongæ utrinque emarginatæ; *pollen* fuscum. *Styli* circiter viginti, breves expansi.

**** REPTANTIA. *Ramis suffruticosis, angulosis, decumbenti-prostratis demum reptantibus (tribus exceptis); foliis acute compresso-triquetris absque papulis, apicibus rectis; petalis (M. edule excepto) rubicundis, in hortis (ratione ignota) sæpius rarissimis.*

† MAJORA. *Ramis decumbenti-prostratis, rarissime florentibus.*

M. (Scymetar-leav'd) foliis acinaciformibus impunctatis connatis, marginibus subundulato-scabris, petalis lineari-lanceolatis.—*M. acinaciforme. Willd. sp. pl. 2. p. 1051.—Hort. kew. ed. 2. v. 3. p. 238.—Nobis in misc. nat. p. 76.* *acinaciforme.* 66.

α. Ramis brevioribus subinde florentibus.—*M. acinaciforme. Salisb. parad. 90.—Andrew s. bot. repos. 508.—M. acinaciforme flore amplissimo purpureo. Dill. elth. 282. t. 211. f. 270; et t. 212. f. 271.*

β. Ramis longioribus, in hortis nunquam florentibus.

HABITAT ad Caput Bonæ Spei. G. H. ♄.

FLORET Jun.—Sept.

CULT. 1714.

OBS. *Flores* in var. α, amplissimi trientales læte rubicundi. *Pedunculi* angulati, infra apicem bibracteati. *Bracteæ* foliiformes. *Calyx* amplissimus turbinatus quinquefidus anceps, laciniis inæqualibus, tribus minoribus altè membranaceis. *Styli* numerosi. *Germen* intus pulposum sive aquosum, circiter 16-loculare.

OBS. 2. I have seen but three flowers of this magnificent but shy-flowering species; the first in June 1804, communicated by Mr. John Ross, but dying off when it arrived; the second by R. A. Salisbury, Esq.; and the third (in a dried state) by Mr. J. Howard.

M. (Smooth Scymetar-leav'd) foliis acinaciformibus lævigatis, marginibus cartilagineis integris. *Nobis in misc. nat. p. 76.—Hort. kew. ed. 2. v. 3. p. 239.* *lævigatum.* 67.
*

HABITAT ad Caput Bonæ Spei. G. H. ♄.
FLORET Jun. at rarissimè.
CULT. ante 1802.
OBS. I have not seen the flowers of this species, but understand from Mr. Trimmer of Brentford, that he has produced them. And Mr. Colvill Junior informs me he saw them, at Mr. T.'s I believe; and that they were large and rubicund.

rubro-cinctum. 68. * M. (Red-border'd) foliis acutè compresso-triquetris sub-acinaciformibus, marginibus carinâque asperis rubris.
HABITAT ad Caput Bonæ Spei. G. H. ♄.
FLORES non vidi.
INTROD. 1811, a Dom. Beak.
OBS. This character was derived from a small sprig grown in the open air, and communicated in October 1811 by Mr. Ross. It very much resembles *M. lævigatum*, but appears less. Its red margins are very handsome, but may not prove permanent.

edule. 69. M. (Hottentot-Fig) foliis æquilateraliter triquetris impunctatis subcanaliculatis utrinque attenuatis: carina serrulata; angulis ramulorum integerrimis.—*M. edule. Willd. sp. pl.* 2. *p.* 1052.—*Hort. kew. ed.* 2. *v.* 3. *p.* 239.—*Nobis in misc. nat. p.* 76.—*Mesembr. falcatum, majus, flore amplo luteo. Dill. elth.* 283. *t.* 212. *f.* 272.
HABITAT ad Caput Bonæ Spei. G. H. ♄.
FLORET Jul. Aug. at rarissimè.
INTROD. 1690.
OBS. I have never seen the great yellow flowers of this species; but they were produced in the summer of 1810 in Mr. Swainson's collection

upon a large plant which stood in the Green-house and hung over the flue.

M. (Flat-leav'd Hottentot-Fig) foliis compres- *subala-*
so-triquetris impunctatis subacinaciformibus : *tum.*
marginibus cartilagineis scabriusculis, ramulis 70.
superne ancipitibus subalato-undulatis. *Nobis* *
in misc. nat. p. 76.—Hort. kew. ed. 2. v. 3. p. 239.
HABITAT C. B. S. G. H. ♄.
FLORES non vidi.
CULT. 1802.

M. (Lesser Hottentot-Fig) foliis subbiunciali- *dimidia-*
bus acute-triquetris, senectis compressis, ca- *tum.*
rina supernè ustulatim serrulata. 71.
HABITAT C. B. S. G. H. ♄. *
FLORES non vidi.
INTROD. 1811, a Dom. Beak.
OBS. The above character is drawn from a small sprig, communicated by Mr. Ross in October 1811, grown in the open air. It is extremely like *M. edule*, but with leaves only half as long, although nearly of the same thickness.
OBS. 2. The above six species so closely resemble each other, that they might without any great violence to nature be united as varieties of one. The same remark will apply to the next three. But it surely appears better, and even easier, for a student to keep them distinct. For the principles which would level them would sink the genus into comparatively few species; and clog them with innumerable, and, for the most part, more unintelligible varieties. Besides, as all the species in this little work (except *M. hybridum*) have been raised from native seeds, imported by the cu-

rious, in different, and distant years; it is at least a presumptive proof, that they are original and distinct ones. But it is nevertheless a fact, which must not be kept back, that not half the seedlings of this vast Genus which are raised from Cape seeds prove to belong to *old* species. So that we are either not yet acquainted with half the species in existence; or, those which do exist vary in a manner we have no example of in other genera.

When the great botanic traveller Masson (who traversed the Cape countries for twenty years) was asked whether he had sent all the Mesembryanths to England, his emphatic answer was, "No; nor half of them."

glaucescens. 72. * M. (Glaucescent) foliis subæquilateraliter triquetris glaucescentibus: caulibus decumbenti-prostratis; floribus solitariis sessilibus, stylis septem.

HABITAT in Nova Hollandia. G. H. ♄.

FLORET Jul. A. M

INTROD. circa 1804.

Communicavit Reverend. Dom. Kirby, cum sequente.

OBS. A sequente vix differt, nisi in *petalis* pallidioribus; *calyce* quinquefido fere sessili absque *pedunculo* alato; *floribus* et *foliis* paulo majoribus manifestè glaucioribus; *caulibusque* robustioribus.

virescens. 73. * M. (Virescent) foliis subæquilateraliter triquetris virescentibus; caulibus decumbenti-prostratis; pedunculis terminalibus solitariis alato-ancipitibus; stylis octo.

HABITAT in Nova Hollandia. G. H. ♄.

FLORET Jun. A. M.

Introd. circa 1804.

Obs. *M. æquilaterali* simile, at longè robustius. *Pedunculi* subunciales compresso-alati supernè incrassati. *Calyx* quadrifidus fere compresso-anceps laciniis satis exiguis, duabus acutis foliiformibus, duabus brevioribus membranaceis. *Corolla* ut in *M. æquilaterale* at major et speciosior, lætissimè rubicunda, basi alba, petalis numerosis latiusculis obtusis, apice eroso-denticulatis. *Filamenta* brevia convergentia alba, superne lutea. *Styli* octo filiformes ramentacei viridi-lutei, post anthesin patentissimi, apicibus revolutis. *Germina* non examinavi: at *capsulæ* maturæ ruberrimæ pulposæ ficiformes, et sine dubio edules, ut in *M. edule*.

M. (Equal-sided) foliis subæquilateraliter triquetris, marginibus lævibus ecartilagineis; caulibus debilibus prostratis.—*M. æquilaterale. Nobis in misc. nat. p.* 77.—*Willd. sp. pl.* 2. *p.* 1051.—*Hort. kew. ed.* 2. *v.* 3. *p.* 239. *æquilaterale.* 74. *

Habitat in Nova Hollandia. G. H. ♄.

Floret Jun. A. M. at rarissimè.

α. Caulibus rarissimè florentibus.

Obs. *Flores* semel solum vidi, inter maximos certè et formosos numeravi, profundè rubicundos pedunculatos, solitarios vel binatos axillares, e ramis lateralibus. *Styli* sex.

Introd. 1791.

β. *Ramis* brevioribus sæpius florentibus *foliisque* aliquantillum robustio rbus: *stylis* decem: *capsulis* maturis ruberrimis pulposis ficiformibus ut in præcedentibus.

Communicavit Dom. Howard.

Introd. circa 1801.

sarmentosum. 75. * M. (Sarmentous) sarmentis sesquipedalibus, foliis confertis æquilateri-triquetris, pedunculis ternatis e ramis lateralibus.

HABITAT in Nova Hollandia. G. H. ♄.

FLORET Apr. A. M.

INTROD. 1805.

OBS. Communicavit Dom. Donn, anno 1806. *Rami* prostrati debiles, omnibus geniculis remotiusculis radicantibus, sarmenta omnino simulantes. *Ramuli* breves oppositi subinde floriferi. *Folia* biuncialia satis gracilia subcurvata viridia minutissimè rugulosa, ad lucem multipunctata; marginibus integris subcartilagineis. *Pedunculi* sæpius ternati medio bibracteati, superne clavati tuberculati. *Calyx* quinquefidus laciniis æqualibus minus membranaceis quam in plurimis. *Petala* mediocria obtusa rubicunda, costâ saturatiore. *Filamenta* convergentia albicantia superne rosea. *Antheræ* luteæ. *Styli* quinque breves subulati apice recurvi ex luteo-virides.

OBS. 2. This is a very distinct and singular species, and in the slight rugosities of its leaves and peduncles, as well as somewhat in its habit and appearance, approaches the *Section Prostrata*, yet nevertheless belongs decidedly to the present one.

†† ERECTIORA. *Ramis erecto-decumbentibus rarius radicantibus; foliis brevioribus.*

filamentosum. 76. M. (Thready-flower'd) foliis confertis compresso-triquetris subacinaciformibus punctatis, marginibus serrulato-asperis internodio longioribus.—*M. filamentosum. Willd. sp. pl.* 2. 1051.—*Hort. kew. ed.* 2. *v.* 3. *p.* 240.—*Nobis in misc. nat. p.* 78.—*M. falcatum ma-*

jus flore purpureo mediocri. Dill. elth. t. 212. f. 273.

HABITAT C. B. S. G. H. ♄.

FLORET Mar. Ap. rariùs.

CULT. 1732.

OBS. *Corolla* mediocris saturate rubicunda pulchella. *Styli* quinque.

M. (Serrulated) foliis compresso-triquetris marginibus minime serrulatis vix cartilagineis, internodiis sæpe longioribus; ramulis purpurascentibus asperiusculis; stylis subocto ramentaceis.—*M. serrulatum. Nobis in miscel. nat. p. 77.—Hort. kew. ed. 2. v. 3. p. 239.* *serrulatum.* 77. *

HABITAT C. B. S. G. H. ♄.

FLORET Nov. Dec. valde infrequens.

INTROD. 1795.

OBS. *Flores* solitarios terminales compressos, 2-3 solum vidi. *Pedunculi* compressi asperiusculi rubentes fere biunciales supra medium *bracteis* duabus foliiformibus, calycem versus incrassati. *Calyx* quinquefidus laciniis tribus magnis foliiformibus paululum inæqualibus, quartâ valde diminutâ, quintà omnino altèque membranaceâ medio exustâ. *Petala* fere ut in *M. filamentoso*, sed paulo latiora breviora magisque rubicunda, nervo centrali vix saturatiore. *Stamina* ut in *M. rubricaule*. *Styli* si rite examinavi (at dubio) circiter octo; breviores quam in *M. rubricaule*.

M. (Red-stem'd) foliis compresso-triquetris marginibus cartilagineis serrulatis internodiis sæpe brevioribus; ramulis rubris oppositis; stylis quinque.—*M. rubricaule. Nobis in misc. nat. p. 77.—Hort. kew. ed. 2. v. 3. p. 240.* *rubricaule.* 78. *

HABITAT C. B. S. G. H. ♄.
FLORET Dec.—Feb. A. M.
CULT. 1802.
OBS. *Rami* erectiusculi non reptantes, fere duplo graciliores uti *folia* quam in ultimo. *Flores* terminales semunciales læte rubicundi, nervo centrali saturatiore.

††† CONFERTA *caulibus adscendentibus semipedalibus non radicantibus; ramis foliisque longis acute-triquetris integris, valde confertis; floribus speciosis.*

spectabile. 79. * M. (Showy) foliis confertis longis glaucis; stylis obovatis, staminibus albidis duplo brevioribus —*M. spectabile. Nobis in miscel. nat. p.* 68 —*Willd. sp. pl.* 2. *p.* 1048.—*Bot. magaz. f.* 396.—*Hort. kew. ed.* 2. *v.* 3. *p.*
HABITAT C. B. S. G. H. ♄.
FLORET Mai.—Oct. A. M. copiosè.
INTROD. 1787.
OBS. *Flores* magni numerosi subpaniculati terminales læte rubicundi.

conspicuum. 80. * M. (Dark Showy) foliis confertissimis sublongis viridibus, stylis lanceolatis sublongitudine staminum roseorum.
HABITAT C. B. S. G. H. ♄.
FLORET Sept. Oct. A. M. copiosè.
INTROD. circa 1806.
OBS. Præcedenti in plurimis simillimum, *caule* altiore, ramosiore, florifero magis compresso saturatiore fuscedine; *foliis* viridibus; *bracteis* minus connatis: *floribus* paniculatis numerosioribus, longe saturatioribus rubedine usque ad basin, et speciosioribus; *stylis* longioribus acutioribus angustioribus.

Obs. Germen turbinatum quinqueloculare.
Communicavit Dom. Howard.

†††† Humillima. *Ramis longis omnino prostratis filiformibus reptantibus foliisque cæspitosis.*

M. (New Zealand) foliis glaucescentibus punctulatis triquetris lævibus, caule semitereti reptante, pedunculis ancipitibus.—*M. australe. Hort. kew. ed.* 1. *v.* 2. *p.* 187; *ed.* 2 *v.* 3. *p.* 241.—*Willd. sp. pl.* 2. *p.* 1047.—*Nobis in miscel. nat. p.* 79. *australe.* 81.

Habitat in Nova Hollandia. G. H. ♄.
Floret Jul. Aug. A. M.
Introd. 1773.
Obs. *Flores* dilute rubicundi, *pedunculis* obtusè ancipitibus superne incrassatis. *Styli* quinque.

M. (Green prostrate) foliis triquetris impunctatis lævibus perviridibus basi semicylindricis; caule reptante semitereti.—*M. crassifolium. Willd. sp. pl.* 2. 1047.—*Hort. kew. ed.* 2. *v.* 3. *p.* 240.—*Nobis in misc. nat. p.* 78.—*M. crassifolium repens flore purpureo. Dill. elth.* 266. *t.* 208. *f.* 257.—*Ficoides africana reptans folio triangulari viridi flore saturate purpureo. Bradl. succ.* 4. *p.* 16. *t.* 38. *crassifolium.* 82.

Habitat C. B. S. G. H. ♄.
Floret Mai.—Aug. A. M. rarius.
Cult. ante 1727.
Obs. *Flores* axillares solitarii saturate rubicundi. *Styli* quinque.
β. Aliquantillum minus, rarissime florens.
Obs. Differs in nothing but in being rather smaller than α, and flowering far less often.

I have seen it bloom but thrice in four-and-twenty years.

clavellatum. 83. * M. (Club-leav'd) foliis expansis obsolete triquetris clavatis viridibus obtusissimis cum mucronulo. *Nobis in miscel. nat. p.* 79.—*Hort. kew. ed.* 2. *v.* 3. *p.* 241.

HABITAT in Nova Hollandia. G. H. ♄.

FLORET Jun. Jul. A. M.

INTROD. 1803.

OBS. Variat.

α. Ramis longioribus minus confertis. *Pedunculi* breves e ramulis lateralibus, solitarii. *Calyx* quinquefidus, laciniis tribus membranaceis, duabus foliiformibus. *Flores* (Jul. 1804) M. crassifolii at pulchriores. *Petala* intus perrubicunda vivacissima, basi externèque albida, marginibus latè lætèque rubicundis. *Filamenta* albida inæqualia. *Antheræ* flavescentes lacinias calycinas vix æquantes. *Styli* quinque filamentis paulo breviores tenuissimi seu setacei virides.

β. Ramis ramulisque longè densioribus seu confertis.

γ. Ramis erectioribus brevioribus, valde confertis.

OBS. This is the last of the New-Holland species, being the sixth in number, and it is very remarkable they should all have rubicund flowers, and trailing reptant shoots.

reptans. 84. M. (Small creeping-glaucous) foliis confertissimis triquetris acutis glaucis, punctis magnis pellucidis scabris, caule filiformi tenuissimo reptante.—*M. reptans. Willd. sp. pl.* 2. 1047.—*Hort. kew. ed.* 2. *v.* 3. *p.* 241.—*Nobis in misc. nat. p.* 80.

HABITAT C. B. S. G. H. ♄.
FLORES non vidi, at secundum *Hort. kew. ed.* 1. *rubicundos*, in Jun. et Aug.
INTROD. 1774.
OBS. I once had a plant of this most shy-flowering species which offered a single sessile flower-bud in May, but it came not to any maturity.

***** PLANIFOLIA. *Foliis planis, sæpe subcarinatis caulibus decumbenti-prostratis effusis, præpapulosis.*

† ANNUA, *radice semper annuâ.*

M. (Ice-plant) foliis alternis ovatis undulatis papulosis, floribus sessilibus, calycibus late ovatis retusis acutisque.—*M. crystallinum. Willd. sp. pl.* 2. *p.* 1033.—*Hort. kew. ed.* 2. *v.* 3. *p.* 224 —*Nobis in misc. nat. p.* 43.—*M. crystallinum plantaginis folio undulato. Dill. elth. t.* 180. *f.* 221.—*Ficoides africana, &c. Bradl. succ.* 5. 15. *t.* 48. *crystallinum.* 85.
HABITAT in Græcia prope Athenas. G. H. ☉.
FLORET Mai.—Aug.
CULT. ante 1727.
OBS. If this species is raised on a hotbed in early spring, and planted out in the open borders in May, it will spread half a yard luxuriantly every way, and make a fine appearance till November; but will ripen no seed. Plants intended for seeding must be kept constantly in the Greenhouse in small pots; watered seldom, and very little, merely enough to keep them alive and dwarf. If the seeds are suffered to shake themselves in the Greenhouse, a succession of the plants may be kept up all the

year round, which, from the extraordinary ice-like appearance of their leaves, stems, and buds, are universally admired; although their white hair-like flowers are small and trifling. It is occasionally used to garnish dishes: by candle light its icy branches glitter with unusual brilliance.

There was at Kew, a few years ago, another distinct species of Ice-plant larger leav'd than the present, and of upright, not prostrate growth, but I had no opportunity of describing it.

pinnatifidum. 86. M. (Jagged-leav'd) foliis oblongis pinnatifidis papulosis, petalis minutis luteis. *Willd. sp. pl.* 2. *p.* 1032.—*Hort. kew. ed.* 2. *v.* 3. *p.* 224. —*Bot. mag.* 67.—*Plant. grass. cum icone.*— *Nobis in misc. nat. p.* 44.

HABITAT ad Caput Bonæ Spei, et etiam in Chili. G. H. ⊙.

FLORET Mai.—Oct. A. M.

INTROD. 1774.

glabrum. 87. M. (Smooth-leav'd) foliis amplexicaulibus distinctis spatulatis glaberrimis, pedunculis longitudine foliorum, calycibus hemisphæricis. *Hort. kew. ed.* 1. *v.* 2. *p.* 193; *et ed.* 2. *v.* 3. *p.* 222.—*Willd. sp. pl.* 2. *p.* 1034.—*Nobis in misc. nat. p.* 44.—*Bot. repos. t.* 57.

HABITAT C. B. S. G. H. ⊙.

FLORET Jul.

INTROD. 1787.

OBS. This should be raised like the Ice-plant in early spring on artificial heat, planted in small pots and placed on a warm border out of doors in May or June; for, contrary to the nature of the Ice-plant, it will not ripen them

in the house, unless more air is given than is consistent with the welfare of most other house plants.

M. (Sun-flower) foliis planis lævibus, pedunculis longissimis, calycibus basi planis angulatis. *Hort. kew. ed.* 1. *v.* 2. *p.* 193; *et ed.* 2. *v.* 3. *p.* 223.—*Willd. sp. pl.* 2. *p.* 1034. —*Nobis in misc. nat. p.* 45.—*Plant. grass. cum icone.* *Helianthoides.* 88. †

HABITAT C. B. S. G. H. ⊙.
FLORET Aug.—Oct.
INTROD. 1774.
OBS. I have not yet found this species in our gardens, although it appears to be in those of France.

M. (Great yellow-flower'd) foliis planiusculis late lanceolatis lævibus subciliatis distinctis, caule pedunculis germinibusque hirtis. *Sp. pl.* 698.—*Hort. kew. ed.* 2. *v.* 3. *p.* 223.—*Willd. sp. pl.* 2. *p.* 1034.—*Nobis in miscel. nat. p.* 45.—*Bot. magaz. t.* 540. *pomeridianum.* 89.

HABITAT C. B. S. G. H. ⊙.
FLORET Aug.—Oct. P. M.
INTROD. 1774.

M. (hairy-Yellow) foliis lineari-lanceolatis ciliatis, caule, pedunculis, bracteis, calycibusque hirtis, floribus polygynis.—*M. pilosum. Nobis in misc. nat. p.* 47. *pilosum.* 90. *

HABITAT C. B. S. G. H. ⊙.
FLORET Jun.—Aug. A. M.
INTROD. ante 1800.
OBS. Corolla nitide lutea. *Styli* circiter 19.

M. (Transparent) foliis oppositis spathulatis obtusis scabridis: papulis oblongis, foliolis calycinis oblongis obtusis medio coarctatis. *limpidum.* 91. †

Hort. kew. ed. 1. v. 2. p. 183; et ed. 2. v. 3. p. 225.—Nobis in misc. nat. p. 46.—M. (limpidum) subacaule, foliis scabrido-punctatis ovato-lanceolatis planis, pedunculis fructiferis reflexis, calycinis laciniis inæqualibus spathulatis. Willd. sp. pl. 2. p. 1030.—Plant. grass. cum icone.—M. cuneifolium. Jacq. ic. 3. t. 288.—Nobis in misc. nat. p. 47.

HABITAT C. B. S. G. H. ⊙.

FLORET Jul.

INTROD. 1774.

OBS. I have never yet seen this species.

lanceolatum. 92. * M. (Spear-leav'd) foliis alternis lanceolatis obtusiusculis papulosis, calycibus pedunculatis crystallinis. *Nobis in misc. nat. p. 45.—Hort. kew. ed. 2. v. 3. p. 225.*

HABITAT C. B. S. G. H. ⊙.

FLORET Mai.—Oct. A. M.

INTROD. 1795.

OBS. Humitusum; *Pedunculi* brevissimi 1—3-lineares papulosi. *Corolla* parva alba, extus apice flavo-purpurascens. *Styli* 5. An satis a sequenti distinctum?

OBS. As the root is *annual*, and seeds are very rarely ripened, this species cannot be preserved but by striking cuttings twice or thrice a year. Old ones never survive a winter, although young ones do so readily, thus safely preserving the species for many years. How far this and similar facts disturb Mr. Knight's theory of grafts (i. e. cuttings), partaking of the *debility* and even *duration* of their parents, I have not leisure here to attempt to examine.

M. (Sessile-flower'd) foliis planis spathulatis caulibusque papulosis, ramis divaricatis, floribus sessilibus. *Hort. kew. ed.* 1. *v.* 2. *p.* 193. *& ed.* 2. *v.* 3. *p.* 225.—*Nobis in misc. nat. p.* 46.—*Willd. sp. pl.* 2. *p.* 1034. *sessiliflorum.* 93. †

HABITAT C. B. S. G. H. ⊙.

FLORET Jul.

INTROD. 1774.

OBS. Nondum vidi.—FLORES lutei secundum *Hort. kew.*

†† BIENNIA. *Radice semper bienni foliis planis.*

M. (Aiton's) foliis oppositis alternisque ovato-spathulatis subundulatis papulosis, ramis calycibusque angulatis.—*M. Aitonis. Jacq. hort. vind. v.* 3. *p.* 1. *t.* 7.—*M. papulosum. Willd. sp. pl.* 2. *p.* 1033.—*Hort. kew. ed.* 1. *v.* 2. *p.* 182, *excluso synon. Linn.* *Aitonis.* 94.

HABITAT ad Caput Bonæ Spei. G. H. ♂.

FLORET Jun.—Oct. P. M.

INTROD. 1774.

OBS. This plant cannot be kept alive unless renewed from cuttings twice a year. Those which have lived a summer and flowered, die the following winter; but such as have been raised in autumn, all pass the first winter very well. It ripens no seeds with us, although a very free and beautiful flowerer, opening its rosy blossoms in the afternoon.

M. (Aster-leav'd) foliis lanceolatis planis impunctatis, radicalibus capitatis, ramorum alternis, calycibus pentagonis. *Willd. sp. pl.* 2. *p.* 1030.—*Hort. kew. ed.* 2. *v.* 3. *p.* 226.—*Nobis in misc. nat. p.* 49.—*M. Tripolii folio. Dill. elth. t.* 179. *f.* 220.—*Ficoides africana* *Tripolium.* 95.

&c. Bradl. succ. 5. p. 14. t. 47.—Pluk. mantiss. 77. t. 329. f. 4.

HABITAT ad Caput Bonæ Spei. G. H. ♂.

FLORET Jun.—Aug. A. M.

CULT. 1700.

OBS. The old plant dies the second winter, but it may be preserved a great many years by an annual supply of cuttings; but as it seeds freely there is no occasion for it.

††† PERENNIA. *Radice semper perenni.*

humifusum. 96. † M. (Narrow-leav'd Ice-plant) foliis amplexicaulibus spathulatis carinatis: papulis conicis scabris, petalis minutissimis. *Hort. kew. ed. 1. v. 2. p. 179.—Nobis in misc. nat. p. 50.—Willd. sp. pl. 2. p. 1033.—Hort. kew. ed. 2. v. 3. p. 226.*

HABITAT C. B. S. G. H. ♄.

FLORET Jul. Aug.

INTROD. 1774.

OBS. I have not yet seen this species, which according to the Hortus Kewensis is shrubby; otherwise I should have thought it might not be distinct from the strictly annual *M. lanceolatum.*

cordifolium. 97. M. (Heart-leav'd) foliis petiolatis cordatis, ovatisque, papulosis, caule tereti, calycibus sæpe quadrifidis.—*Mesembr. cordifolium. Linn. supp. 260.—Gloxin Obs. bot. p. 22. t. 1. f. a.—Smith. spic. bot. p. 6. t. 6.—Plant. grass. cum icone.—Hort. kew. ed. 1. v. 2. p. 182.—Willd. sp. pl. 2. p. 1032.—Jacq. hort. vind. 3. 487.—Nobis in misc. nat. p. 50.*

HABITAT C. B. S. G. H. ♄. S. H. ⊙.

FLORET Mai.—Sept.

INTROD. 1774.

Obs If this plant is suffered to shake its seeds in a South border, it becomes a hardy annual. But in the greenhouse I have trained two branches of a plant in a 60 sized pot upwards of ten feet each way in two years; which were broken at last by accident, although still in a growing state.

M. (Houseleek leav'd) foliis ovato-lanceolatis confertis oppositis alternisque remotis. *Willd. sp. pl. 2. p.* 1032. *(exclusa synonymo Petiver.)* —*Hort. kew. ed. 2. v. 3. p.* 227.—*M. tortuosum. Plant. grass. cum icone.*—*Nobis in misc. nat. p.* 51.—*M. tortuosum foliis Sempervivi expansis. Dill. elth. t.* 182. *f.* 223.— *Bradl. succ.* 3. *p.* 7. *t.* 25. *expansum.* 98.

Habitat C. B. S. G. H. ♄.

Floret Jul. Aug. A. M.

Cult. 1705.

M. (Skeleton-leav'd) foliis lanceolato-ellipticis papuloso-crystallinis, petalis staminibusque argenteis, caulibus filiformibus. *Nobis in misc. nat. p.* 50.—*Hort. kew. ed. 2. v. 3. p.* 227.—*M. emarcidum. Thunb. prod.* 88? *anatomicum.* 99. *

Habitat C. B. S. G. H. ♄.

Floret Jul. Aug. A. M.

Cult. ante 1803.

Obs. The nerves of the old exsiccated leaves remain long upon this species, and give to it a strange skeleton-like appearance.

M. (Various-leav'd) foliis lanceolatis acuminatis carinatis, subinde obtuse triquetris, canaliculatisque; pedunculis crassissimis. *Nobis in misc. nat. p.* 51.—*Hort. kew. ed. 2. v. 3. p.* 227.—*Ficoides capensis folio late-acuto flore albo intus luteo. Petiv. gaz. t.* 78. *f.* 10. *varians.* 100. *

HABITAT ad Caput Bonæ Spei. G. H. ♄.
FLORET Jul.—Oct. A. M.
CULT. 1706.

tortuosum. 101. M. (Twisted) foliis confertis ovato-lanceolatis acuminatis concavis subcarinatis, calycibus triphyllis bicornibus. *Hort. kew. ed. 2. v. 3. p. 227.—Willd. sp. pl. 2. p. 1036.—Nobis in misc. nat. p 51.—M. tortuosum, foliis Sempervivi congestis. Dill. elth. t. 181. f. 222.—Ficoides capensis procumbens oleæfolio flore albo medio croceo. Bradl. succ. 2. p. 7. t. 16.*
HABITAT C. B. S. G. H. ♄.
FLORET Mai.—Oct. A. M.
CULT. 1705.

pallens. 102. M. (Pale) foliis glaucis oppositis oblongo-lanceolatis acutis canaliculatis obtusè carinatis. *—M. pallens. Hort. kew. ed. 1. v. 2. p. 182. —Nobis in misc. nat. p. 52.—Willd. sp. pl. 2. p. 1045.—Hort. kew. ed. 2. v. 3. p. 228.— M. expansum. Plant. grass. cum icone.*
HABITAT C. B. S. G. H. ♄.
FLORET Jul.—Oct. A. M.
INTROD. 1774.

****** CANALICULATA. *Foliis linearibus, junioribus canaliculatis (M. tuberoso excepto) subtus convexis, papulosis; ramis sæpe suffrutescentibus, radice sæpe perenni, rarius annuá.*

† ANNUA. *Radice annuâ.*

nodiflorum. 103. M. (Knot-flowering) foliis alternis teretiusculis obtusis basi ciliatis. *Willd. sp. pl. 2. p. 1043.—Hort. kew. ed. 2. v. 3. p. 228.— Nobis in misc. nat. p. 54.—Kali crassulæ*

minoris foliis. Moris. hist. 2. p. 610. *s.* 5. *t.* 33. *f.* 7.

HABITAT in Ægypto. G. H. ☉.
FLORET Aug.—Oct. A. M.
CULT. 1739.
OBS. As this species ripens no seed with us, having but an annual root, it can only be preserved in the gardens by renewing it from cuttings two, three, or four times in a year: or by fresh supplies of foreign seed.

M. (Apetalous) foliis amplexicaulibus distinctis linearibus, supra planis, internodiis papulosis longioribus, papulis oblongis, floribus pedunculatis; calycibus quinquefidis.—*M. apetalum. Linn. supp.* 258.—*Hort. kew. ed.* 1. *v.* 2. *p.* 180; & *ed.* 2. *v.* 3. *p.* 228.—*Willd. sp. pl.* 2. *p.* 1036.—*Nobis in misc. nat. p.* 54.—*M. copticum, humifusum, foliis lineari-lanceolatis, calycibus foliolis magnis parum inæqualibus petalis inconspicuis multoties longioribus. Jacq. hort.* 3. *p.* 7. *t.* 6. ***apetalum.*** **104.**

HABITAT C. B. S. G. H. ☉.
FLORET Jul. Aug.
INTROD. 1774.

M. (Small-flower'd) foliis filiformi-semiteretibus distinctis: papulis ovatis floribus lateralibus sessilibus; terminalibus pari foliorum cinctis. *Hort. kew. ed.* 1. *v.* 2. *p.* 178; *ed.* 2. *v.* 3. *p.* 228.—*Willd. sp. pl.* 2. *p.* 1037.—*Nobis in misc. nat. p.* 55. ***caducum.*** **105.**

HABITAT C. B. S. G. H. ☉.
FLORET Jul. Aug.
INTROD. 1774.

†† SPINULIFERA. *Costis foliorum exsiccatorum basi persistentibus, et spinulescentibus; ramulis, foliis pedunculisque papuloso-crystallinis; caudice senecto sæpe strumoso.*

tuberosum. 106. M. (Tuberous shrubby) foliis subtriquetro-compressis minute papulosis supernè recurvantibus, radice senectâ ingenti-tuberosâ.—*M. tuberosum. Willd. sp. pl.* 2. *p.* 1039.—*Hort. kew. ed.* 2 *v.* 3. *p.* 247.—*Nobis in misc. nat. p.* 89.—*Plant. grass. cum icone*—*M. frutescens radice ingenti-tuberosa. Dil. elth. t.* 207. *f.* 264.

HABITAT C. B. S. G. H. ♄.

FLORET Jul.—Oct. A. M.

CULT. 1714.

OBS. *Folia* non canaliculata. *Flores* miserè minuti, rubicundi, intus tincturâ fulvâ, calycibus vix longiores.

spinuliferum. 107. * M. (Spinulescent) foliis confertis semiteretibus papulosis canaliculatis, caudice ramisque erectis incrassatis. *Nobis in misc. nat. p.* 57.—*Hort. kew. ed.* 2. *v.* 3. *p.* 229.

HABITAT C. B. S. G. H. ♄.

FLORET Jun.—Oct. A. M.

CULT. ante 1794.

OBS. In hoc et plus minus in sequentibus hujus divisionis, costæ seu nervi principes foliorum exsiccatorum sæpe persistunt, et infernè in spinulas permanentes demum transformantur.

grossum. 108. M. (Gouty) foliis linearibus papulosis obtusis teretiusculis utrinque attenuatis canaliculatis, caudice incrassato, ramis diffusis debilibus.—*M. grossum. Hort. kew. ed.* 1. *v.* 2. *p.* 191.—*Willd. sp. pl.* 2. *p.* 1043.—*Nobis in misc. nat. p.* 56.—*Hort. kew. ed.* 2. *v.* 3. *p.* 229.

Habitat C. B. S. G. H. ♄.
Floret Mai.—Sept. A. M.
Introd. 1774.
Obs. *Corolla* mediocris petalis multiserialibus, pallide carneis, demum stramineo-carneis.—*Misc. nat. l. c.*

M. (Green-flower'd) foliis semiteretibus papuloso-pilosis, calycibus hirsutis, petalis viridibus, caudice incrassato, ramis diffusis.—*M. viridiflorum. Hort. kew. ed.* 1. *v.* 2. *p.* 196; *et ed.* 2. *v.* 3. *p.* 229.—*Willd. sp. pl.* 2. *p.* 1042.—*Nobis in misc. nat. p.* 56.—*Bot. magaz. t.* 326. *viridiflorum.* 109.
Habitat C. B. S. G. H. ♄.
Floret Jul.—Nov.
Introd. 1774.
Obs. *Corolla* absolute viridis, in qua ab omnibus notabiliter differt.

M. (Nitid) foliis semiteretibus pulcherrime papulosis, pedunculis dichotomis calycibusque crystallinis, ramis gracilibus nodosis diffusis. *Nobis in misc. nat. p.* 57.—*Hort. kew. ed.* 2. *v.* 3. *p.* 229.—*M. pruinosum. Thunb. prod. p.* 90.—*M. (brachiatum) Plant. grass. cum icone.* *nitidum.* 110. *
Habitat C. B. S. G. H. ♄.
Floret Jul.—Oct.
Cult. ante 1794.

M. (Icy-channel'd) foliis linearibus semiteretibus canaliculatis papulosis, caulibus prostratis filiformibus. *Nobis in misc. nat. p.* 57.—*Hort. kew. ed.* 2. *v.* 3. *p.* 229. *canaliculatum.* 111. *
Habitat C. B. S. G. H. ♄.
Floret Jul.—Oct. A. M.
Cult. ante 1794.

Obs. *Corolla* parva dilutè rubicunda. *Capsula* carnosa pellucida.

††† Varia. *Caulibus suffrutescentibus absque characteribus præcedentium, foliis sæpius plus minusve papulosis.*

villosum. 112. M. (Villous) foliis linearibus semiteretibus canaliculatis pubescentibus, caulibus pilosis prostratis. *Willd. sp. pl.* 2. *p.* 1042.—*Hort. kew. ed.* 2. *v.* 3. *p.* 230.—*Nobis in misc. nat. p.* 58.

Habitat C. B. S. G. H. ♄.

Floret Jul. A. M.

Cult. 1759.

Obs. Non rite hujus generis; sed affinior Sesuvio. *Corolla* nulla, at *Calyx* incrassatus quinquefidus extus viridis pilosus, intus nudus purpurascens; quasi calyx corollaque in uno juncti.

brachiatum. 113. M. (Three-fork'd) caulibus foliisque cylindricis papulosis ramis trichotomis. *Hort. kew. ed.* 1. *v.* 2. *p.* 19.—*Willd. sp. pl.* 2. *p.* 1044.—*Nobis in misc. nat. p.* 58.—*Hort. kew. ed.* 2. *v.* 3. *p.* 230.—*M. decussatum. Thunb. prod. p.* 68.

Habitat C. B. S. G. H. ♄.

Floret Jul. Aug.

Introd. 1774.

Obs. *Frutex* tripedalis ramulis numerosissimis trichotomis.

geniculiflorum. 114. M. (Joint-flowering) foliis semiteretibus papulosis internodio brevioribus, floribus sessilibus axillaribus, calycibus quadrifidis, ramis divaricatis.—*M. geniculiflorum. Willd. sp. pl.* 2. *p.* 1037.—*Hort. kew. ed.* 2. *v.* 3. *p.* 230.—

Plant. grass. cum icone.—M. capense geniculiflorum neapolitanum creditum. Dill. elth. 271. t. 205. f. 261.—Ficoides seu Ficus aizoides africana erecta, teretifolia, floribus albis umbellatis. Bradl. succ. 5. 12. t. 34.—Ficoides capense folio tereti fl. albido. Pet. gaz. t. 78. f. 3.

HABITAT C. B. S. G. H. ♄.

FLORET Jun.—Sept. P. M.

CULT. 1727.

OBS. *Flores* pallide straminei. *Rami* articulati, valde dichotomi divaricati.

OBS. 2. Bradley's figure above cited clearly represents this species, but the name and description attached to it as clearly appertain to *M. umbellatum*, which he has also figured on his 44th plate; but with his usual inadvertency has given to it a name and description belonging to *Othonna tenuifolia*, *Linn.* a plant rather resembling *M. umbellatum*, but of the class Syngenesia, and not figured by him at all.

M. (Rushy) foliis subulatis semiteretibus acutis remotis, floribus terminalibus dichotomis, laciniis calycinis quatuor valde inæqualibus. *Nobis in misc. nat. p. 59.—Hort. kew. ed. 2. v. 2. p. 230.—M. (articulatum) foliis lineari-lanceolatis, caule erectiusculo ramoso, floribus secundis albis. Thunb. prod. p. 88?* *junceum.* 115. *

HABITAT C. B. S. G. H. ♄.

FLORET Aug.—Oct. A. M.

CULT. circa 1800.

OBS. *Rami* erecti articulati, mox defoliati juncei. *Flores* parvi numerosissimi rubicundi basi albicantes.

ciliatum. 116. † M. (Ciliated) foliis oppositis connatis semiteretibus, stipulis membranaceis reflexis laceris ciliiformibus. *Hort. kew. ed.* 1. *v.* 2. *p.* 179. —*Willd. sp. pl.* 2. *p.* 1037.

Habitat C. B. S. G. H. ♄.

Floret ....

Introd. 1774.

Obs. I have never seen this species, and from the circumstance of its being described in both editions of Hortus Kewensis, as having reflexed lacerated stipules, should greatly doubt its belonging to this genus. May it not rather belong to that division of the *Arenariæ,* which is above named *Stipularia?*

fastigiatum. 117. * M. (Level-topp'd) foliis confertis flexuoso-reflexis subulatis semiteretibus glaucis, calycinis laciniis æqualibus, tribus utrinque membranaceis, caulibus gracilibus erectis, mox subdecumbentibus. *Nolis in misc. nat. p.* 60, *excluso synonymo Bradleii.*—*Hort. kew. ed.* 2. *p.* 231.

Habitat C. B. S. G. H. ♄.

Floret Jul.—Sept. A. M.

Cult. ante 1794.

Obs. *Corolla* extus sordide fulva intus pallidior, mox lutescens et albicans.

β. *M. (reflexum)* foliis flexuoso-reflexis obtusis semiteretibus glaucis, calycinis laciniis valde inæqualibus, caule senecto erecto basi incrassato. *Nolis in misc. nat. p.* 60.—*Hort. kew. ed.* 2. *v.* 3. *p.* 231.

γ. *Mesemb. (pallens)* folijs oppositis amplexicaulibus distichis oblongo-lanceolatis, acutis obtuse carinatis : papulis minutis. *Jacq. hort.*

16. 279.—*M. reflexum, β. Floribus purpurascentibus. Nobis in misc. nat. p.* 61.

Obs. I have often seen this variety growing and flowering in Kew Gardens, but never possessed it.

M. (Small-blossom'd) foliis lanceolato-linearibus carinatis impunctatis, distinctis; floribus pedunculatis calycis quadrifidis, foliolis duobus longisssmis, aliis brevissimis. *Jacq. hort.* 3. 15. 278. *sub nomine M. parviflori.* *micranthon.* 118.

Habitat C. B. S. G. H. ♄.

Floret....

Cult. circa 1804.

Obs. If memory does not greatly deceive, I have likewise seen this species in the Royal Gardens at Kew, but never possessed it. It is extremely distinct from my *M. parviflorum*, being quite of a different section; and would probably better arrange before, than after, M. fastigiatum.

M. (Flexuose) foliis confertis flexuoso-recurvis perviridibus semiteretibus, laciniis calycinis quinque digitiformibus, caulibus subflexuosis gracilibus lucidis. *Nobis in misc. nat. p.* 61. —*Hort. kew. ed.* 2. *v.* 3. *p.* 231. *flexuosum.* 119. *

Habitat C. B. S. G. H. ♄.

Floret Jul. Aug. A. M.

Introd. 1795.

Obs. *Corolla* fere ut in M. fastigiato α. extus tincturâ rubedinis.

M. (Shining) foliis semiteretibus confertis apice flexuoso-recurvis, calycinis laciniis 5-6 percrassis digitiformibus subæqualibus, foliis obtusis horizontalibus.—*M. splendens. Willd. sp. pl.* 2. *p.* 1042.—*Hort. kew. ed.* 2. *v.* 3. *splendens.* 120.

p. 231.—*Mesemb. foliis confertis splendentibus, flore pallido. Dill. elth.* 270. *t.* 204. *f.* 260.

HABITAT C. B. S. G. H. ♄.

FLORET Jun.—Aug.

CULT. 1723.

α. Calycinis laciniis sæpe 6 percrassis digitiformibus subæqualibus, foliis obtusis horizontalibus. *Misc. nat. l. c.*

β. Calycinis laciniis semper 5 gracilioribus subæqualibus, petalis extus ad apicem subfulvis, intus albidis, foliis patentibus (nec horizontalibus) acutioribus: stylis 6: capsulis 6-locularibus, 6-angulatisque. *Misc. nat. l. c.*—*Ficoides capensis frutescens foliis teretibus confertis glaucis, flore albo. Bradl. succ.* 1. *p.* 7. *t.* 6.

******* FLAVIFLORA. *Caulibus suffrutescentibus sæpe erectis, foliis plus minus triquetris, subcylindricisve, sæpe brevissimis absque papulis: petalis flavis, aurantiis croceis coccineisve.*

† PERFOLIOSA. *Foliis subtriquetris, valde confertis glaucis pulposis, petalis flavis croceisve.*

veruculatum. 121. M. (Spit-leav'd) foliis confertis perglaucis triquetro-cylindricis acutis arcuatis distinctis, floribus pomeridianis.—*M. veruculatum. Willd. sp. pl.* 2. *p.* 1041.—*Hort. kew. ed.* 2. *v.* 3. *p.* 241.—*Plant. grass. cum icone.*—*M. foliis veruculiformibus, floribus mellinis umbellatis. Dill. elth. t.* 203. *f.* 259.

HABITAT C. B. S. G. H. ♃.

FLORET Mai. a meridiano fere ad vesperem.

OBS. The heads of small yellow flowers have a honey-like scent. The crop of large blunt juicy leaves, is the heaviest of all the genus; and, if not watered too much, they have rubicund tips, and make a fine appearance on old plants; entirely hiding their clustered branches in clusters of foliage.

M. (Purple-saffron-flower'd) foliis confertis tereti-triquetris obtusis perglaucis, foliolis calycinis valde inæqualibus, petalis extus læte rubicundis intus croceis. *Nobis in misc. nat. p.* 81.—*Hort. kew. ed.* 2. *v.* 3. *p.* 242. *purpuro-croceum.* 122. *

HABITAT C. B. S.

FLORET Aug.—Oct. A. M.

OBS. Before the shewy flowers open, there is all the colour externally of a bright rubicund blossom; but as soon as they expand, no colour on the petals within, but deep saffron appears. The plant is delicate, and requires frequent renewal from cuttings.

†† NOCTIFLORA. *Caulibus suffrutescentibus gracilibus duris, valde defoliatis (in hoc genere), foliis fragilibus et inde fere deciduis, seu caducis, teretiusculis impunctatis, calycibus quadrifidis, corollis odoratissimis intus albis, radicibus senectis carnoso-incrassatis fibris perpaucis.*

OBS. The brittle and thence nearly caducous nature of the leaves of this subdivision, is peculiar to it, as are also its slender wiry shoots. It also has the faculty of shooting freely from the old wood when cut down below the leaves. These circumstances, but more especially its brittle and slightly attached and thence nearly deciduous leaves, render it pro-

bable that it is likewise hardier than the others with respect to cold: and yet I know it is capable of enduring considerable heat.

noctiflorum. 123. M. (Night-flowering) foliis remotis obsolete semicylindricis distinctis glaucis, petalis intus albis, extus luteis phœniceisve, cortice albo.—*M. noctiflorum. Willd. sp. pl. 2. p. 1038.—Hort. kew. ed. 2. v. 3. p. 232.—Nobis in misc. nat. p. 63.*

α. Floribus extus roseis, intus albis.
M. noctiflorum fl. intus albo, extus phœniceo odoratissimo. Dill. elth. t. 206. f. 262.—Plant. grass. cum icone.

β. Floribus extus luteis.
M. noctiflorum, flore intus candido extus stramineo. Dill. elth. t. 206. f. 263.

Obs. *Flores* majores quam in α, et forte minus fragrantes. *Petala* valde numerosa, exteriora primo plerumque lutea acuta et integra, demum pallidiora, interiora alba. *Filamenta* nivea præinæqualia petalis breviora. *Antheræ* sulphureæ minutæ. *Styli* quatuor suberecti breves, lineares viridi-lutei obtusi lævigati lucidi. *Germen* supernè conicum quadriloculare. *Calyx* quadrifidus obconicus carnosus, laciniis duabus exterioribus duplo majoribus magisque membranaceis, omnibus obtusis. Cætera ut in α.

Habitat C. B. S. G. H. ♄.

Floret Jun.—Aug. Vespere.

Cult. 1714.

Obs. The outer yellow petals finally fade to nearly a white colour; and I believe in that state the plant has been called a white flowered variety: although the new blown flowers are invariably yellow on the outside.

M. (Straw-colour'd) foliis remotis subcylindricis distinctis subglaucis exactè semierectis, corollis intus albis, extus fulvis, cortice cinereo-fusco.—*M. stramineum. Nobis in misc. nat. p.* 63. *excluso synonymo Dillenii.—Hort. kew. ed.* 2. *v.* 3. *p.* 232. *stramineum.* 124. *

HABITAT C. B. S. G. H. ♄.
FLORET Jun.—Aug. Vespere.
INTROD. circa 1795.
OBS. *Flores* pauciores quam in *M. noctifloro* vix dichotomi. *Radices* senecti incrassati et fere fusiformes.
OBS. 2. Vulgo dictum est *Zil,* apud Hottentottos.

M. (Horizontal-leav'd) foliis remotis subcylindricis distinctis glaucis exactè horizontalibus, corollis extus stramineis, intus albis, cortice cinereo-albo.—*M. defoliatum. Nobis in misc. nat. p.* 64?—*Mesemb. stramineum, α. Nobis in misc. nat. p.* 63-4, *exclusis synonymis Linnæanis Dillenianisque.* *horizontale.* 125. *

HABITAT C. B. S. G. H. ♄.
FLORET Jun.—Aug. Vespere.
INTROD. 1795.
OBS. This is probably Jacquin's M. clavatum, from my recollection of his figure, (*Hort. schœnbr. t.* 108.) His description of the bark and petals, and position of the leaves will determine this.

††† TARDIFLORA. *Foliis brevibus vel subinde brevissimis, floribus (ratione ignota) in hortis rarissimis.*

M. (Soft) foliis patentibus turgido-triquetris canescentibus, marginibus obtusis lineato- *molle.* 126.

punctatis, ramis ancipitibus decumbentibus. —*M. molle. Hort. kew. ed.* 1. *v.* 2. *p.* 192. *v.* 3. *p.* 242.—*Willd. sp. pl.* 2. *p.* 1048.— *Nobis in misc. nat. p.* 83.

HABITAT C. B. S. G. H. ♄.

FLORET Oct. A. M. rarissimè.

INTROD. 1774.

OBS. *Flores* (a Dom. Howard communicati) terminales solitarii, pedunculis sescuncialibus teretiusculis infernè aliquantillum attenuatis virentibus, infra medium basimve versus *bracteis* duabus foliiformibus amplectentibus altè instructis, deorsum valde compressis. *Calyx* quinquefidus laciniis parvulis, duabus paulo minoribus, ad latera apicesque membranaceis. *Corolla* parva semuncialis, mane expansa, petalis pallidè rubicundis, angustè linearibus æquali latitudine, apicibus sæpius integris. *Filamenta* brevia convergentia atropurpurea basi alba; exteriora sterilia, apicibus pullis, umbonem pullum medio flore constituentibus. *Antheræ* albidæ tincturâ flavedinis. *Styli* quinque, maturi filamentorum longitudine crassi apicibus subulatis, paululum ramentacei.

strictum. 127. * M. (Straight) foliis triquetris obtusis expansis glaucescentibus grandipunctatis, caule ramosissimo lignoso rigidissimo stricto.—*M. strictum. Nobis in misc. nat. p.* 82.—*Hort. kew. ed.* 2. *v.* 3. *p.* 242.

HABITAT C. B. S. G. H. ♄.

FLORET ....

INTROD. circa 1795.

OBS. Although this species often grows two or three feet high, it produces no flowers with us.

M. (Boat-leav'd) foliis cymbiformibus triquetris patentibus glaucis, caulibus ramosis: ramulis subfiliformibus suberectis. *Nobis in misc. nat. p.* 82.—*Hort. kew. ed.* 2. *v.* 3. *p.* 242.—*M.* (*sessile*) *foliis trigono-globosis glabris, caule erecto tereti ramoso, floribus sessilibus rubris. Thunb. prod.* 89? *cymbiforme.* 128. *

Habitat C. B. S. G. H. ♄.

Floret ....

Introd. circa 1793.

Obs. It will grow a foot high, but never flowers with us.

M. (Grain-leav'd) foliis distinctis oppositis subtriquetris ovatis graniformibus trilinearibus, petalis luteis, staminibus collectis, expansis triuncialibus.—*M. graniforme. Nobis in misc. nat. p.* 82.—*Ficoides capensis ramosa, foliis minoribus, Noctiflora lutea. Bradl. succ.* 2. 11. *t.* 20. *graniforme.* 129. *

Habitat C. B. S. G. H. ♄.

Floret Autumno, Vespere.

Cult. ante 1727.

Obs. I have never seen this species, but inserted it on Bradley's authority alone, who says: "The leaves are hardly bigger than grains of wheat: and that the flowers (which are yellow) do not open till the sun is down."

†††† Frequentiflora. *Foliis longiusculis triquetris: floribus frequentibus speciosis flavis aureis aurantiisve.*

Obs. All the species of this division are extremely beautiful, and free flowerers.

M. (Golden) foliis cylindrico-triquetris punctatis distinctis, petalis croceis, stylis atropur- *aureum.* 130.

pureis.—*M. aureum. Willd. sp. pl.* 2. *p.* 1049. —*Plant. grass. cum icone.*—*Bot. magaz.* 262. —*Nobis in misc. nat. p.* 84.

HABITAT C. B. S. G. H. ♄.

FLORET Mar.—Oct. A. M.

CULT. 1750.

OBS. This species if not kept too warm is a free and beautiful flowerer: but, like almost all the shrubby species, it thrives best without artificial heat, requiring protection from frost and wintery rains only; and very free air at all times whenever it is fair, and Fahrenheit's thermometer is not under 35 degrees.

glaucum. 131. M. (Glaucous-leav'd) foliis triquetris valde compressis glaucis subscabris, foliolis calycinis ovato-cordatis, petalis subdistantibus sulphureis, pistillis luteis.—*M. glaucum. Willd. sp. pl.* 2. *p.* 1048.—*Hort. kew. ed.* 2. *v.* 3. *p.* 243.—*Nobis in misc. nat. p.* 83.—*M. scabrum, flore sulphureo convexo. Dill. elth.* 256. *t.* 196. *f.* 248.—*Ficoides afra caule lignoso, erecto, folio triangulari ensiformi scabro, flore luteo magno. Bradl. succ.* 4. *p.* 15. *t.* 37.—*Ficoides frutescens folio triangulari brevi glauco. Moris. hist. s.* 12. *t.* 6. *f.* 3.

HABITAT C. B. S. G. H. ♄.

FLORET Mai.—Jul. A. M.

CULT. 1696.

OBS. I have had this species survive a winter in the open air, but in a very dry situation.

β. foliis brevioribus sed latioribus angulis, undique magis scabris.

aurantium. 132. * M. (Orange-flower'd) foliis perglaucis triquetris subcompressis, bracteis semiteretibus,

calycinis foliolis oblongo-ovatis, petalis aurantiis imbricatis, stylis extus purpureis. *Nobis in misc. nat. p.* 84.—*Hort. kew. ed.* 2. *v.* 3. *p.* 243.

HABITAT C. B. S. G. H. ♄.

FLORET Jun.—Aug. A. M.

INTROD. 1793.

M. (Scarlet-flower'd) foliis tereti-triquetris subcompressis obtusis glaucescentibus, pedunculis basi lævibus, petalis coccineis. *Nobis in misc. nat. p.* 85.—*Hort. kew. ed.* 2. *v.* 3. *p.* 243.—*Plant. grass. cum icone.*—M. bicolorum β. *Willd. sp. pl.* 2. *p.* 1039.—Ficoides seu Ficus aizoides africana folio longo tenui flore aurantio. *Boerh. ind. alt.* 291. 5. *coccineum.* 133. *

HABITAT C. B. S. G. H. ♄.

FLORET copiosè Jul.—Oct. A. M.

CULT. ante 1793.

β. elatius, floribus minus aurantiis tincturâ conspicuâ rubicundâ; foliis paulo longioribus minus glaucescentibus.

OBS. I have had this species survive a winter in the open air.

M. (Two-colour'd) foliis subtriquetris acutis viridibus, pedunculis calycibusque subæqualibus scabris, petalis intus luteis: ramis erectis.—*M. bicolorum. Willd. sp. pl.* 2. *p.* 1039. —*Hort. kew. ed.* 2. *v.* 3. *p.* 244.—*Nobis in misc. nat. p.* 85. *excluso synonymo Bradleyi.* —*M. frutescens tenuifolium flore croceo. Dill. elth.* 202. *f.* 258.—*Ficoides seu Ficus aizoides africana minor erecta triangulari folio viridi flore intus aureo, foris purpureo. Moris. hist.* 3. *p.* 507. *s.* 12. *t.* 6. *f.* 4. *bicolorum.* 134.

HABITAT C. B. S. G. H. ♄.
FLORET Mai.—Sept. A. M. copiosè.
CULT. 1732.

inæquale. 135. * M. (Unequal-cupp'd) foliis subtriquetris perviridibus, pedunculis fructiferis compresso-clavatis; laciniis calycinis valde inæqualibus membrana longioribus: ramis effusè decumbentibus.—*Ficoides Capensis frutescens folio tereti punctato petalis luteis. Bradl. succ.* 1. *p.* 8. *f.* 7. *mala.*
HABITAT C. B. S. G. H. ♄.
FLORET Mai.—Sept. A. M.
CULT. ante 1716.
OBS. M. bicolori simillimum, at ramis magis decumbenti-effusis, omni parte paulo majore, exceptis pedunculis gracilioribus at longioribus: *flores* extus pallidiores.
In M. bicolore laciniæ calycis florentis æquali longitudine sunt, membranas earum non superantes.
In M. coccineo membranæ calycis, breviores quam laciniis.

variabile. 136. * M. (Variable) foliis subtriquetris compressis scabris glaucis, calycinis laciniis subæqualibus, petalis luteis, caulibus effusis decumbentibus.—*M. variabile. Nobis in misc. nat. p.* 85.—*Hort. kew. ed.* 2. *v.* 3. *p.* 244.
HABITAT ad Caput Bonæ Spei. G. H. ♄.
FLORET Jun.—Aug. A. M. copiosè.
CULT. 1796.
OBS. Præcedentibus primo intuitu dignoscitur foliis glaucioribus et tenuioribus, et a M. deflexo, retroflexo, et violaceo, (quibus maxime affine est) petalis luteis, et foliis minus glaucis.

OBS. A large plant of this kind presents the singular spectacle of flowers of various colours open at the same time upon one root. On first opening they are orange or saffron within; then yellow; soon after, pale yellow or whiteish, with a tinge of red and a red midrib; afterwards fleshy-white within, rubicund without, and with a deeper midrib; and at last quite rubicund, but paler within, except the midrib.

M. (Slender-leav'd) foliis semiteretibus subcompressis subulatis viridibus glabris internodiis longioribus, petalis coccineis caulibus decumbentibus.—*M. tenuifolium. Willd. sp. pl.* 2. 1040.—*Hort. kew. ed.* 2. *v.* 3. *p.* 244. —*Plant. grass. cum icone.*—*M. tenuifolium procumbens folio tenuiore viridi, flore coccineo. Dill. elth. t.* 201. *f.* 256.—*Ficoides Capensis humilis tereti folio flore coccineo. Bradl. succ.* 1. *p.* 13. *t.* 9.—*Ficoides africana minor procumbens folio tenuiori viridi flore coccineo. Moris. hist.* 3. *p.* 507. *s.* 12. *t.* 8. *f.* 6. *tenuifolium.* 137.

HABITAT C. B. S. G. H. ♄.
FLORET Jul. A. M. pulcherrimè.
CULT. 1700.

††††† SCABRIDA. *Foliis punctato-scabris, obsolete triquetris, subcompressis rectis.*

M. (Scabrous) foliis subtriquetris viridibus verrucoso-scaberrimis, foliolis calycinis ovato-acuminatis, petalis pallidis apice crenatis, staminibus collectis.—*M. scabrum. Willd. sp. pl.* 2. 1049.—*Hort. kew. ed.* 2. *v.* 3. *p.* 236. —*Nobis in misc. nat. p.* 71.—*M. purpureum* *scabrum.* 138.

scabrum, staminibus collectis. Dill. elth. 260. *t.* 197. *f* 251.
HABITAT C. B. S. G. H. ♄.
FLORET Jul. A. M. infrequens.
CULT. 1731.

versicolor. 139. * M. (Changeable-flower'd) foliis subtriquetris glaucescentibus verrucoso-præscabris, foliolis calycinis ovato acuminatis, apice subbidentatis, staminibus collectis. *Nobis in misc. nat. p.* 70.—*Hort. kew. ed.* 2. *v.* 3. *p.* 235.
HABITAT C. B. S. G. H. ♄.
FLORET Mai.—Aug. A. M.
INTROD. 1795.
OBS This is the only flower I am acquainted with that regains its colour after having once lost it. It is rubicund in the morning; pale-silvery to the meridian sun; and rubicund again in the evening. But perhaps there may be some ocular deception in this apparent change, from the dazzling glare of the meridian sun. Or the heat of noon expanding the very surface of the petals, may cause them to reflect the solar rays in a different manner, and with different tints. The regaining of the lost colour *after* the sun's departure favours the idea.

emarginatum. 140. M. (Notch-flower'd) foliis glaucescentibus subtriquetris scabris, calycibus spinosis, petalis violaceis apice crenatis, staminibus patentibus. —*M. emarginatum. Willd. sp. pl.* 2. 1049. —*Hort. kew. ed.* 2. *v.* 3. *p.* 235.—*Nobis in misc. nat. p.* 70.—*M. purpureum scabrum staminibus expansis. Dill. elth. t.* 197. *f.* 250.

—*Ficoides capensis, triangulari folio acuto flore purpureo. Pet. gaz. t. 77. f. 3.*
HABITAT C. B. S. G. H. ♄.
FLORET Jun.—Aug. copiosè. A. M.
CULT. 1732.
OBS. *Corolla* lætissimè violacea seu rubicunda pulcherrima mediocris, petalis apice denticulatis. *Misc. nat. l. c.*

M. (Reflexed) foliis subtriquetris præglaucis scabris, laciniis calycinis petalisque rubicundis distantiusculis, staminibus collectis, cortice dealbato.—*M. retroflexum. Nobis in misc. nat. p. 71.—Hort. kew. ed. 2. v. 3. p. 236.* *retroflexum.* 141. *
HABITAT C. B. S. G. H. ♄.
FLORET Mai.—Oct. copiosè. A. M.
CULT. ante 1794.
OBS. *Flores* læte rubicundi, petalis basi non imbricatis, sole ardente calycibusque retroflexis.

M. (Deflexed) foliis subtriquetris glaucis scabriusculis, petalis pallescentibus, basi purpureis imbricatis, staminibus collectis; cortice cinereo fuscoque.—*M. deflexum. Willd. sp. pl. 2. p. 1047.—Hort. kew. ed. 2. v. 3. p. 236.—Nobis in misc. nat. p. 71.—M. violaceum. Plant. grass. ic. 84?—Ficoides seu Ficus aizoides, africana, frutescens, folio glauco parvo, flore violaceo. Bradl. succ. 4. 14. t. 36?* *deflexum.* 142.
HABITAT C. B. S. G. H. ♄.
FLORET Mai.—Oct. copiosè. A. M.
INTROD. 1774.
OBS. *Corolla* priore parum minor, et pallidior, petalis numerosioribus, minus ad solem reflexis, et aliquantillum latioribus.

polyanthon. 143. * M. (Copious-flower'd) foliis parvulis glaucis triquetris scabris; ramis rectis dumosis, cortice rufo, floribus paniculatis numerosissimis imbricatis.

Habitat C. B. S. G. H. ♄.

Floret Augusto A. M. forte copiosissimè omnium.

Cult. circa 1803.

Obs. *Suffrutex* erectus valde dumosus bipedalis. *Folia* minora quam in præcedente conferta triquetra obtusa scabra glauca. *Flores* terminales parvuli pallidiusculè rubicundi, inter se ad solem ardentem imbricatim confertissimi. *Capsula* ut in affinibus.

Obs. This brilliant species is often taken for *M. glomeratum.*

****** Aspericaulia. *Caulibus suffrutescentibus, ramulis plus minusve scabris, floribus sæpe aurantiis; foliis plus minusve papulosis.*

speciosum. 144. * M. (Specious-flower'd) foliis semicylindricis subulato-subacutis incurvis papulosis, laciniis calycinis obtusis, petalis atro coccineis obtusis, basi viridibus.—*M. speciosum. Nobis in misc. nat. p.* 98.—*Hort. kew. ed.* 2. *v.* 3. *p.* 250.

Habitat C. B. S. G. H. ♄.

Floret Mai.—Oct. A. M.

Cult. ante 1793.

Obs. This is one of the most beautiful species in the genus, and if it is not treated too tenderly, flowers freely. It is more rambling than the next, with more incurved and more pointed leaves; each pair more resembling a pair of horns.

M. (Glittering) foliis semicylindricis obtusiusculis subrecurvis papulosis, laciniis calycinis subacutis, petalis acutis atro-coccineis basi purpureis.—*M. micans. Willd. sp. pl.* 2. *p.* 1043.—*Hort. kew. ed.* 2. *v.* 3. *p.* 249. —*Bot. magaz.* 448.—*M. micans, flore phœniceo filamentis atris. Dill. elth. t.* 215. *f.* 282.—*Ficoides capensis, folio tereti argenteo petalis perplurimis aurantiacis. Bradl. succ.* 1. *p.* 9. *t.* 8.—*Ficoides capensis flore croceo. Pet. gaz. t.* 78. *f.* 9. *satis bona.* — ***micans.*** 145.

HABITAT C. B. S. G. H. ♄.

FLORET Mai.—Oct. A. M.

CULT. 1704.

OBS. This also, if properly grown, is a very beautiful and free-flowering species. It should be renewed from cuttings every summer, watered but little, and seldom in winter, and not be permitted to root through the pots, which should be kept in a sheltered but unshaded southern aspect; and in winter placed in a pit or frame, with the glasses quite off in all fair, not frosty weather: and defended from frosts by matts or litter, but kept in the dark by such cover no longer than for the necessary defence against frost. A slight frost, if the plant is dry, will not injure it. This treatment will suffice for all the genus except the dwarfs; and M. lacerum, which is somewhat tender. The soil should be a light and dry one, and but little screened. In short, the common treatment given to *early Mignionette* will answer very well.

M. (Spotted-stalk'd) foliis expansis remotis obtusis compresso-semicylindricis, caulibus maculatis erectis. *Nobis in misc. nat. p.* 98.— — ***maculatum.*** 146. *

M. micans β. Nobis in misc. nat. p. 98.—*Hort. kew. ed.* 2. *v.* 3. *p.* 250.

HABITAT C. B. S? G. H. ♃.

FLORET . . . .

INTROD. 1792.

OBS. The flowers of this species I have not yet seen. It resembles both the preceding very much, but is less diffuse, taller, and more erect; its branches are less rough, and more slender and wiry; and its leaves are shorter, less curved, and more horizontal.

pulverulentum. 147. * M. (Dusty-leav'd) foliis cylindrico-triquetris obtusis, punctis pulverulentis scabris, calyce sexfido, petalis rubicundis. *Nobis in misc. nat. p.* 99.—*Hort. kew. ed.* 2. *v.* 3. *p.* 250.

HABITAT C. B. S. G. H. ♄.

FLORET Mai. A. M. rarissimè.

CULT. 1792.

OBS. *Corolla* facie et magnitudine *M. barbati* infra, petalis soli ardenti meridiano pomeridianoque expansis, profundè rubicundis obtusis integris, basi valde attenuatis albicantibus. *Filamenta* numerosa erecta aurantia basi pallidiora. *Antheræ* lutescentes. *Styli* 6 filamentorum longitudine, apicibus recurvis. *Misc. nat. l. c.*

brevifolium. 148. M. (Short-leav'd) foliis cylindraceis, obtusissimis papulosis patentibus, ramis diffusis. *Hort. kew. ed.* 1. *v.* 2. *p.* 188.—*Willd. sp. pl.* 2. *p.* 1044.—*M. brevifolium, β. caule erecto, ramis patentibus, foliis longioribus (quam α.), petalis spatulato-linearibus, profunde rubicundis vel purpureis. Nobis in misc. nat. p.* 99.

HABITAT C. B. S. G. H. ♄.
FLORET Jul.—Oct. A. M.
INTROD. 1777.
OBS. Magis erectum quam sequente, ramulis magis compactis et numerosioribus, minus divaricatis. *Folia* parum longiora tenuiora numerosiora minus papulosa. *Membranæ calycinæ* purpurascentes. *Corolla* mediocris vel parvula pulcherrima profundè et vivacissimè rubicunda. *Misc. nat. l. c.*

M. (Globular) foliis brevissimis expansis subgloboso-cylindraceis papulosis ramis divaricatis sæpe decumbentibus, staminibus expansis purpurascentibus.—*M. (subglobosum) foliis subglobosis, caule rigido ramoso, ramulis filiformibus floribus pedunculatis rubris. Nobis in misc. nat. p.* 62.—*M. capillare. Thunb. prod.* 89. *nec aliorum?*—*M. brevifolium* α, *foliis brevissimis, ramis divaricatis et sæpe decumbentibus. Nobis in misc. nat. p.* 99. *subglobosum.* 149.
HABITAT C. B. S. G. H. ♄.
FLORET Jul.—Oct. A. M.
INTROD. circa 1795.
OBS. This has the shortest leaves of all, in proportion to its size, and the most wiry and divaricating branches.

****** HISPIDA. *Ramulis vel foliis vel apicibus foliorum plus minusve hispidis, et papulosis.*

† HISPICAULIA. *Caulibus pedunculisque hispidis, foliis nudis papulosis.*

M. (Hispid) foliis cylindricis obtusis calyceque glabro obconico papulosis, staminibus pistillis longioribus. *Nobis in misc. nat. p.* 100.— *hispidum.* 150.

Hort. kew. ed. 2. *v.* 3. *p.* 250.—*Mesembr. hispidum*, α. *Willd. sp. pl.* 2. 1044.—*Plant. grass. cum icone : mala ex planta magis antiqua.*—*M. papulosum micans flore saturanter purpureo. Dill. elth.* 289. *t.* 214. *f.* 278.

HABITAT C. B. S. G. H. ♄.

FLORET Mai.—Oct. A. M. copiosissimè.

CULT. 1704.

OBS. *Flores* profundè rubicundi pulcherrimi. *Caules* et *pedunculi* magis hispidi quam in sequente.

floribundum. 151. * M. (Numerous-flower'd) foliis cylindricis obtusis papulosis, calyce hemisphærico papuloso-piloso, floribus imbricatis, staminibus pistillis brevioribus. *Nobis in misc. nat. p.* 100. —*Hort. kew. ed.* 2. *v.* 3. *p.* 251.—*Mesemb. hispidum*, β. *Willd. sp. pl.* 2. 1044.—*M. pilosum micans flore purpureo pallidiore. Dill. elth. t.* 214. *f.* 280.

HABITAT C. B. S. G. H. ♄.

FLORET Mai.—Oct. A. M. copiosissimè omnium.

CULT. 1704.

OBS. The flowers of many Mesembryanths, when expanded, more than cover the whole plant; but in the present species, when not too much drawn up by heat or water, the very capsules touch each other every way. It is unquestionably the most abundant flowerer of all. The petals are far paler than in the last species.

hirtellum. 152. * M. (Large-flower'd Bristly) foliis confertis cylindricis obtusissimis crystallino-papulosis, calyce turbinato papuloso-piloso, staminibus

longitudine pistillorum.—*Nobis in miscel. nat. p.* 102.—*Hort. kew. ed.* 2. *v.* 3. *p.* 251.

HABITAT C. B. S. G. H. ♄.

FLORET Mai.—Nov. A. M.

INTROD. 1792.

OBS. *Corolla* majuscula speciosa læte rubicunda, basi alba.

M. (Striped-flower'd) foliis subulatis semicylindricis, calycibus lanuginosis, staminibus collectis longitudine pistillorum. *Nobis in miscel. nat. p.* 103.—*Hort. kew. ed.* 2. *v.* 3. *p.* 251.—*M. striatum. Willd. sp. pl.* 2. 1045. *M. purpureum micans flore purpureo striato. Dill. elth.* 291. *t.* 215. *f.* 281.—*Bradl. succ.* 4. *p.* 13. *t.* 35 *incompleta: excluso titulo, seu synonymo Boerhavii, qui ad M. coccineum pertinet.* *striatum.* 153. *

HABITAT C. B. S. G. H. ♄.

FLORET Mai.—Oct. copiosè.

CULT. 1727.

OBS. The M. striatum figured in *Plant. grass. t.* 132, drawn apparently from an aged woody plant, can hardly belong to this species, because its flowers are smaller, less striated, and paler, with far shorter peduncles, and nearly depilated calyces. These circumstances can scarcely all be attributed to the age of the plant delineated, although most of them may; as the description and synonyms well accord with our plant.

It is observable further, that *Persoon*, in his *Synopsis*, has, under *M. hispidum*, what he denotes as a *subspecies* of that plant, by the following name, character, &c.

" *M. hispidum.* * *tuberculatum,* foliis distinctis

cylindricis papulosis mollibus, caule pedunculis calycibusque hispidis. *Decand. pl. grass.* An satis diversa a sequente? (M. striatum) sed flores non striati D."

Obs. The *M. tuberculatum* of *Mill. dict. ed.* 8. *no.* 32, has nothing to do with this plant, but belongs to M. rostratum as above shewn. Perhaps no Mesembryanthemum ever was so much cultivated amongst us as the present species, at the present time; for I am credibly informed by a Nurseryman, that a person in the neighbourhood of Hammersmith grows and sells annually to the trade, and otherwise about seven thousand pots of it. He grows them in frames, and protects them from frost with litter, nearly in manner recommended under the account of *M. micans*, above (but with richer soil and less water): which gives them a short dense growth, and covers them with their beautiful striated, and, from age, various tinted flowers, every spring. And if the other species of this division, but especially *M. hirtellum*, were treated in the same manner, they would become at least equally lucrative, and still more shewy and interesting. These plants, if accompanied by the other more brilliant kinds, are capable of exhibiting a greater and more varied blaze of floral beauty expanded at one time than almost any genus in existence.

†† Hispifolia. *Foliis undique plus minusve hispidis, caulibus sæpius nudis.*

echinatum. M. (Hedgehog) foliis oblongo-ovatis subtriquetris, laciniis calycinis valde inæqualibus hispidis longitudine petalorum.—*M. echinatum.*
154.

Willd. sp. pl. 2. p. 1042.—Hort. kew. ed. 2. v. 3. p. 252.—Nobis in miscel. nat. p. 103.

α. Corollis luteis, foliis oblongis subtriquetris luteo-viridibus calycibusque valde hispidis.—*M. echinatum. Plant. grass. cum icone.*

β. Corollis albis, foliis ovatis subtriquetris omnino viridibus calycibusque hispidis nudisve.

Habitat C. B. S. G. H. ♄.

Floret Mai.—Oct. A. M.

Introd. 1774.

Obs. The leaves are longer and less gibbous, and yellower, and more hispid with subulate white hairs in α, than in β.

This species sows itself, and many hundreds of seedlings frequently shew themselves in close contact with each other in the garden, near where the old plants have stood, which they invariably resemble; but I have kept none of them to a flowering state.

††† Barbifolia. *Foliis nudis, apice stellato-barbatis.*

M. (Common bearded) procumbens foliis remotis suboblongis exactè semierectis supra planis crassis papulosis apice suoquinqueradiatis, ramulis prælongis gracilibus nudis; calyce quinquefido, laciniis perinæqualibus.—*M. barbatum. Nobis in misc. nat. p. 104.—Hort. kew. ed. 2. v. 3. p. 252.—Plant. grass. cum icone.—Willd. sp. pl. 2. p. 1015.—M. stellatum. Mill. dict. ed. 8. no 11: nec stellatum. Plant. grass. quæ species sequens est.—M. radiatum ramulis prolixis recumbentibus. Dill. elth. t. 191. f. 234.—Ficoides capensis frutescens folio tumido extremitate stellata flore purpureo. Bradl. succ. 1. p. 6. t. 5. nec tab.* *barbatum.* 155.

15, *quæ citata est Cl. Willd. nam bene respondet ad sequentem staturâ totâ pilisque pedunculorum—Ficoides capensis teretifolia, apicibus hirtis. Pet. gaz. t. 77. f. 9. mala.*

Habitat C. B. S. G. H. ♄.

Floret Mai.—Oct. A. M.

Cult. 1705.

Obs. *Corolla* læte rubicunda, tuberculis quinque atro-viridibus intra florem supra ovarium impositis. *Misc. nat. l. c.*

Obs. Radices senectæ valde incrassatæ, fibris paucioribus.

stelligerum. 156. * M. (lesser Bearded) erecto-decumbens, foliis remotiusculis suboblongis patenti-horizontalibus supra planiusculis crassis papulosis, apice subsexradiatis, ramis longis gracilibus nudis; calyce quinquefido laciniis æquali longitudine. —*M. barbatum β. foliis foliolisque calycinis sæpius horizontalibus, ramulis brevioribus, tuberculis atro-viridibus intra florem valde numerosis in circuto non interrupto supra ovarium impositis. Nobis in misc. nat. p.* 104.—*M. barbatum. Bot. magaz. t.* 70.

Habitat C. B. S. G. H. ♄.

Floret Mai.—Oct. A. M.

Introd. circa 1793.

Obs. As this plant comes up every year very plentifully from self-sown seed without varying, there is but little doubt of its being an original and distinct species. It may be readily distinguished from the last at all times by its shorter and less procumbent branches; more crowded and far more expanded leaves, which are also rather more bearded, and rather smaller. The calycine segments are likewise more expanded and not quite so large.

M. (small Bearded) foliis cæspitosis canis semiteretibus crassis, papuloso-scabris, apice multiradiatis, basi ciliatis; ramis crassis brevibus, pedunculis calycibusque 6—8-fidis hirsutis.—*M. hirsutum. Nobis in miscel. nat. p.* 105.—*Hort. kew. ed.* 2. *v.* 3. *p.* 252.—*M. barbatum β. Willd. sp. pl. p.* 1015.—*M. stellatum. Plant. grass. cum icone, sed confusum est cum sequente, excluso synonymo Milleri, no.* 14, *quod ad præcedentem omnino pertinet.*—*M. barbatum. Mill. dict. ed.* 8. *no.* 13.—*M. radiatum humile foliis minoribus. Dill. elth.* 190. *f.* 235.—*Ficoides capensis humilis folio tereti pilis in extremitate stellatis flore purpureo. Bradl. succ.* 2. *t.* 6. *f.* 15. *hirsutum.* 157. *

Habitat C. B. S. G. H. ♄.

Floret Sept.—Nov. quotannis copiosè. A. M.

Cult. 1716.

Obs. Flores majusculi læte rubicundi speciosi.

M. (dwarf Bearded) foliis densissime cespitosis semiteretibus papuloso-scabris, apice multiradiatis, basi subciliatis virescentibus; pedunculis calycibusque 6-fidis hirsutissimis, caudice præcrasso brevissimo.—*M. densum. Nobis in misc. nat. p.* 105.—*Hort. kew. ed.* 2. *v.* 3. *p.* 253. *Bot. magaz. t.* 1220.—*M. barbatum γ. Willd. sp. pl.* 2. *p.* 1016.—*M. radiatum humile foliis majoribus*—*Dill. elth. t.* 190. *f.* 236, *sine rarissimis floribus.* *densum.* 158. *

Habitat C. B. S. G. H. ♃.

Obs. Flores bis tantum vidi magnos speciosos, lætè rubicundos.

******** PERFOLIATA. *Caulibus duris lignosis, foliis valde connatis triquetris, vaginis carnosis absque papulis, apicibus (sp. duabus primis exceptis) aduncis; floribus sæpius albis, rarius rubicundis.*

† GEMINATA. *Ramulis brevibus decumbentibus, sæpe geminatis, foliis altè connato-perfoliatis.*

geminatum. 159. * M. (Twin-shooted) foliis erectis perglaucis lævigatis ultra medium connatis, marginibus cartilagineis, ramulis dichotomis palmaribus. *Nobis in misc. nat. p.* 92.—*Hort. kew. ed.* 2. *v.* 3. *p.* 247.

HABITAT C. B. S. G. H. ♄.

FLORES non vidi.

INTROD. 1792.

OBS. *Rami* senecti semipedales dichotomi adscendentes semper omnino geminatim orientes. *Folia* erecta triquetra crassa, post medium connata.

forficatum. 160. M. (Scissar-leav'd) foliis triquetro-compressis apice spinulosis, caule ancipiti decumbente.—*M. forficatum. Willd. sp. pl.* 2. 1051. *(excluso synonymo Jacquini, quod pertinet ad M. mutabilem nobis.)*—*Hort. kew. ed.* 2. *v.* 3. *p.* 240.—*Nobis in misc. nat. p.* 78.—*Jacq. hort.* 1. *p.* 9. *t.* 26.

HABITAT C. B. S. G. H. ♄.

FLORET Sept. Oct. A. M. rarius.

OBS. Corolla formosa rubicunda vix recte hujus sectionis, nempe species omnino anomala est.

†† Axillaria. *Floribus axillaribus solitariis rubicundis.*

M. (great Perfoliate) foliis valde connatis glaucis acuminatis punctatis apice subtus triacanthis. *perfoliatum.* 161.

α. (*triacanthum*) foliis glaucis subtus triacanthis.—*M. perfoliatum. Mill. dict. ed.* 8. *no.* 19.—*Nobis in misc. nat. p.* 92.—*Hort. kew. ed.* 2. *v.* 3. *p.* 247.—*M. uncinatum, β. Willd. sp. pl.* 2. 1050.—*M. uncinatum, β. majus foliis subtus triacanthis. Plant. grass. p.* 54.—*M. perfoliatum, foliis majoribus triacanthis. Dill. elth. t.* 193. *f.* 240.—*Ficoides africana frutescens perfoliata, folio triangulari glauco punctato, cortice lignoso candido, tenui. Bradl. succ.* 5. *p.* 13. *t.* 46 : *nec* 26, *quæ mihi dubia, vel incognita est, ut olim Cel. Dillenio.*

Obs. *Flores* pauci parvuli, petalis angustissimis rubicundis. *Styli* 5.

β. (*monacanthum*) majus, foliis præglaucis, subtus unidentatis. *Nobis in misc. nat. p.* 92.—*Ficoides africana frutescens, perfoliata, folio triangulari, glauco, punctato, cortice lignoso, candido, tenui. Bradl. succ.* 3. *p.* 8. *t.* 26. *figura dextra.*

Obs. Bradley gives the same name (from Boerhaave's *Ind. alt.* 290. *no.* 16.) to this as to α, but still describes them as distinct species; which, if his figure is true, must really be the case: for it appears three times the size of the other, more glaucous, and far less toothed. But, although one species (M. graniforme) is admitted above, on the sole authority of this careless author, I am not in-

clined to do so by the present plant; especially after what has been remarked concerning him in another place: viz. Transactions of the Entomological Society of London, *p.* 24 and 25.

HABITAT C. B. S. G. H. ♄.

FLORET Aug. A. M. at rarissimè.

CULT. 1714.

OBS. When M. perfoliatum and the following species flowered with me, I noted not that their flowers remained open night and day, which is very probable; as I have distinctly observed that to be the case in the closely allied M. viride. Dillenius, whose accurate and penetrating eye scarcely any thing escaped, is also silent on this point. The rare occurrence of these flowers is a poor excuse for this inattention on my part. But once only have I seen them.

uncinatum. 162. M. (lesser Perfoliate) foliis valde connatis subglaucis punctatis apice subtus diacanthis.—*M. uncinatum. Mill. dict. ed.* 8. *no* 18.—*Nobis in misc. nat. p.* —*M. uncinatum, α. Willd. sp. pl.* 2. 1050.—*M. uncinatum minus, foliis subtus diacanthis. Plant. grass. cum icone.*—*M. perfoliatum, foliis minoribus diacanthis. Dill. elth. t.* 193. *f.* 239.—*Ficoides africana folio triangulari glauco perfoliato brevissimo apice spinoso. Bradl. succ.* 3. *p.* 8. *t.* 27.

HABITAT C. B. S. G. H. ♄.

FLORET Aug. A. M. rarissimè.

CULT. 1725.

viride. 163. * M. (green Perfoliate) foliis integerrimis valde connatis perviridibus impunctatis lævibus,

apicibus uncinato-recurvis; petalis rubicundis. *Nobis in misc. nat. p.* 93.—*Hort. kew. ed.* 2. *v.* 3. *p.* 247.

HABITAT C. B. S. G. H. ♄.

FLORET Jul. per noctem et diem.

INTROD. 1792.

OBS. *Petala* pallide rubicunda; interiora numerosa erecta setacea alba, apicibus recurvis sæpe purpurascentibus. *Filamenta* pauca brevia alba. *Antheræ* luteæ *Styli* septem subulati, apicibus patentibus setaceis. *Capsula* septemlocularis. *Misc. nat. l. c.*

††† PANICULATA. *Floribus (sp. duabus exceptis) albis numerosis paniculatis, foliis plerumque plus minus glaucis, vaginis minus carnosis, sed lineâ longitudinali magis exaratis quam in divisione præcedente, ramulis sæpe subtetragonis.*

M. (least Perfoliate) foliis trilinearibus et ultra patentibus tenuibus vaginisque foliorum scabris, ramis filiformibus. *Nobis in misc. nat. p.* 94.—*Hort. kew. ed.* 2. *v.* 3. *p.* 248. ***tenellum.*** **164.** *

HABITAT ad Caput Bonæ Spei. G. H. ♄.

FLORET Aug. copiosè. A. M.

INTROD. 1792.

OBS. *Flores* parvi (sex-lineares) albi.

M. (rigid Perfoliate) foliis subtrilinearibus horizontalibus vaginisque foliorum glabris, carina apice scabra. ramis rigidissimis patentibus. *Nobis in misc. nat. p.* 95.—*Hort. kew. ed.* 2. *v.* 3. *p.* 248. ***rigidum.*** **165.** *

HABITAT ad Caput Bonæ Spei. G. H. ♄.

FLORET Aug. copiosè. A. M.

Cult. 1793.

Obs. Præcedenti simillimum, at elatius, ramis et ramulis magis rigidis firmisque, nunquam decumbentibus. *Flores* albi parvi.

parviflorum. 166. * M. (small-flower'd Perfoliate) foliis semuncialibus glabris erectis carina minime serrulata, caule tripedali ramisque erectis. *Nobis in misc. nat. p.* 95.—*Hort. kew. ed.* 2. *v.* 3. *p.* 248.

Habitat C. B. S. G. H. ♄.

Floret Aug. A. M.

Cult. 1800.

Obs. *Flores* valde exigui, at concinni, trilineares albi.

vaginatum. 167. * M. (Sheathed) foliis subuncialibus patentibus vaginisque virescentibus glabris, angulis superne asperis.—*M. vaginatum. Nobis in misc. nat. p.* 95.—*Hort. kew. ed.* 2. *v.* 3. *p.* 248.

Habitat C. B. S. G. H. ♄.

Floret Aug. A. M.

Introd. 1802.

Obs. *Suffrutex* bipedalis erectus; ramuli senecti decumbentes patentes; juniores obsoletè quadrangulares virescentes, et aliquantillum lucentes. *Flores* paniculati parvi albi numerosi ut in præcedentibus, vel paulo majores.

β, *(politum)* foliis sub-escuncialibus subpatentibus vaginisque viridibus lævigato lucidis, angulis superne asperis.

Introd. 1802, a C. B S.

Obs. Forte propria species. Majus; *ramulis* crassioribus, *foliis* vaginisque longioribus, minus patulis, longèque lucidioribus, seu absolutè politis. *Flores* Aug. A. M. copiosi parvi albi præcedentium.

M. Imbricated) foliis glaucis remotis lævibus punctulatis sescuncialibus apicibus aduncis, calycibus turbinatis basi valde attenuatis.—*M. imbricatum. Nobis in misc. nat. p.* 96.—*Hort. kew. ed.* 2. *v.* 3. *p.* 248. ***imbricatum.*** 168. *

Habitat C. B. S. G. H. ♃.

Floret Jul. copiose. A. M.

Introd. 1792.

Obs. *Flores* albi parvuli.

β. majus omni parte.

Obs. This variety very nearly unites the present with the next species: indeed the fine gradations between the whole of the species in this division are very remarkable; but they would probably be at least as gradual in most others, if we were in possession of *all the species* which the fingers of Omnipotence have finished.

Some modern Botanists (if we may judge by their works) would unite all the present division into one species. Not so, however, the discriminating Dillenius; or far-experienced Miller.

M. (Many-flower'd) foliis glaucis remotis lævibus punctatis bipollicaribus apicibus aduncis, calycibus cylindricis basi subattenuatis. *Nobis in misc. nat. p.* 95.—*Hort. kew. ed.* 2. *v.* 3. *p.* .—*Pluk. phyt. t.* 117. *f.* 1.—*Ficoides africanum Mesembryanthemum, seu Ficus Aizoides frutescens floribus albis parvis umbellatis. Pluk. almagest.* 149. ***multiflorum.*** 169.

Habitat ad Caput Bonæ Spei. G. H. ♄.

Floret Jul. A. M. copiose.

Obs. Præcedenti solum differt staturâ majore, figurâque capsularum. *Flores* albi parvuli.

foliosum. 170. * M. (many-leav'd Perfoliate) foliis subglaucis lævibus confertis uncialibus obtusis mucronulo subrecurvo, vaginis apice incrassatis: corollis rubicundis.—*M. foliosum. Nobis in misc. nat. p.* 97.—*Hort. kew. ed.* 2. *v.* 3. *p.* 249.

HABITAT ad Caput Bonæ Spei. G. H. ♄.

FLORET Sept. A. M. at rarissimè.

INTROD. 1802.

Flores (deflorati) communicavit Dom. Howard, terminales mediocres in ramis majoribus, sed non in summo seu principe ramo, sæpe ternati pedunculati, rarius quinati (ex divisione medii pedunculi, qui uncialis est et teres,) supernè incrassati, et medio 4—6 bracteis foliiformibus fere imbricatis instructi. *Pedunculi* laterales breviores basi bibracteati. *Calyx* quinquefidus, laciniis duabus membranaceis ut in plurimis. *Petala* usque ad basin altè rubicunda costâ saturatiore; lata ratione longitudinis, obtusa, subinde emarginata. *Filamenta* petalorum colore. *Antheræ* (defloratæ) pallidæ. *Styli* quinque (deflorati) subulati expansi ramentacei lutei, apicibus mucroniformibus recurvatis.

tumidulum. 171. * M. (tumid Perfoliate) foliis remotis virescentibus lævibus subsesuncialibus apicibus subrecurvulis, vaginis apice tumidulis: ramis patentibus, corollis rubicundis.

HABITAT C. B. S. G. H. ♃.

FLORET Mar. rarissimè.

INTROD. circa 1802.

OBS. Communicavit Dom. Howard. *Flores* non vidi, sed terminales rubicundos, *calyce* quinquefido, fere præcedentis, secundum Dom. Howard.

Inter præcedentem et sequentem, at omnino gracilius.

M. (Umbel'd) foliis subglaucis scabrido-punctatis remotis biuncialibus gracilibus apicibus recurvis, vaginis apice tumidis: corollis albis. —*M. umbellatum. Willd. sp. pl.* 2. *p.* 1038. —*Hort. kew. ed.* 2. *v.* 3. *p.* 249.—*Nobis in misc. nat. p.* 97.—*Mill. dict. ed.* 8. *no.* 6.— *M. fruticescens floribus albis umbellatis. Dill. elth.* 227. *t.* 208. *f.* 266.—*Bradl. succ. dec.* 5. *t.* 44. *exclusâ totâ descriptione, quæ omnino pertinet ad Othonnam tenuissimam Linn.* *umbellatum.* 172.

Obs. This is the last of the Perfoliate shrubby species. Nearly the whole of them are perhaps the hardiest plants of the Genus, and some of them I have known survive a winter on uncovered rock-work. And I conceive they would flourish well on a *bank* of lime rubbish a foot thick, *sloping* from the base of a south wall, planted close to the bricks, and defended in the most severe weather with a little loose straw. Those which survived would produce more flowers than if nursed up in a Greenhouse.

Indeed Miller, speaking of the more hardy species of this genus, says:

"The other shrubby kinds may be sheltered in winter under a common frame, where, if they are protected from frost and wet, it is all they require; for the hardier these are treated, the greater quantity of flowers they will produce: and some of the sorts are so hardy, as to live abroad when placed close to a good aspected wall, and in a poor dry soil; so that where there is room to dispose them against a wall,

and the border is raised with lime rubbish to prevent their rooting deep and growing luxuriant, they may be preserved through the winter with very little shelter, and these will flower much better than those under cover." *Mill. dict. l. c.*

********* ADUNCA. *Foliis distinctis (sine vaginis incrassatis) absque papulis, apicibus plus minusve aduncis, petalis rubicundis, caulibus suffrutescentibus plus minusve erectis (excepto ultimo reptante).* Forte genus proprium.

† INCLAUDENTIA. *Floribus nocte et die expansis, bracteis basi latissimis, foliis compresso-triquetris plus minusve scabrido-punctatis, ramulis valde compressis.*

bracteatum. 173. M. (Double-bracted) foliis viridibus, bracteis quatuor late ovatis carinatis calycem amplectentibus, petalis basi albis, ramulis fusco-rubris.—*M. bracteatum. Hort. kew. ed.* 1. *v.* 2. *p.* 185. & *ed.* 2. *v.* 3. *p.* 216. *(excluso synonymo quod sequens est).—Nobis in misc. nat. p.* 90 —*M. bracteatum. Willd. sp. pl.* 2. *p.* 1050. *(excluso synonymo Dillenii, quod sequens est.)*

HABITAT ad Caput Bonæ Spei. G. H. ♄.

FLORET Aug. fin. ad init. Jan. per noctem et diem copiosè pulcherrimè.

INTROD. 1774.

OBS. As I first saw this species at Kew, it is most likely the *M. bracteatum* of the *Hort. kew. ed.* 1. which in that case wrongly cites *Dillenius*, whose figure belongs to *M. radiatum*, which I never observed at Kew.

M. (Radiated) foliis glaucescentibus, bracteis lato-ovatis pedunculos superne amplectentibus, petalis omnino rubicundis, ramulis subconfertis canescentibus.—*M. radiatum. Nobis in misc. nat. p.* 90.—*Hort. kew. ed.* 2. *v.* 3. *p.* 246.—*M. uncinatum scabrum petalis purpureis circumactis. Dill. elth. t.* 197. *f.* 249. *radiatum.* 174. *

HABITAT C. B. S. G. H. ♄.

FLORET Aug.—Nov. per noctem diemque.

CULT. 1732.

OBS. *Corolla* tota rubicunda, major quam in priore. *Rami* confertiores.

M. (Rough-compressed) foliis glaucescentibus æquilateri-triquetris scaberrimis, bracteis ovato-acutis pedunculos superne amplectentibus, petalis omnino perrubicundis. *Nobis in misc. nat. p.* 91.—*Hort. kew. ed.* 2. *v.* 3. *p.* 246. *compressum.* 175. *

HABITAT C. B. S. G. H. ♄.

FLORET Aug.—Nov. copiosè.

CULT. 1792.

OBS. Dignoscitur primo intuitu, foliis valde scabris.

M. (Two-edged) ramis decumbentibus ancipitibus brunneo-canescentibus; foliis acinaciformi-triquetris, lateribus inferne submembranaceis; punctis pellucidis magnis elevatis. *anceps.* 176. *

HABITAT C. B. S. G. H. ♄.

FLORET Sept. Oct.

INTROD. 1811, a Dom. Beak.

Communicavit Dom. Evans.—*Flores* perfectos (rubicundos) non vidi.

OBS. *M. stellato* simillimum, sed minus erec-

tum foliis duplo crassioribus, nec longioribus, punctis longè majoribus elevatioribus; carinâ lateribusque magis pellucentibus.

stellatum. 177. * M. (Starry) foliis glaucescentibus gracilibus scabriusculis bracteis ovato-acutis calycem fere amplectentibus, petalis rúbicundis, ramulis strictissimis. *Nobis in misc. nat. p.* 91.—*Hort. kew. ed.* 2. *v.* 3. *p.* 216.

Habitat C. B. S. G. H. ♄.

Floret Aug.—Nov. copiosè.

Obs. A præcedentibus dignoscitur ramulis strictioribus, foliisque gracilioribus.

†† Claudentia. *Floribus vespere claudentibus, foliis lævibus.*

virgatum. 178. * M. (Twiggy) foliis triquetro-compressis acutis subglaucis remotis, ramis virgatis elongatis distantibus. *Nobis in misc. nat. p.* 88.—*Hort. kew. ed.* 2. *v.* 3. *p.* 245.

Habitat C. B. S. G. H. ♄.

Floret Feb.—Apr. A. M. perparcè.

Cult. 1793.

Obs. The long, twiggy, gangling branches easily distinguish this species from all others.

curvifolium. 179. * M. (Crook'd-leav'd) foliis basi expansis, tunc incurvo-recurvis compresso-semiteretibus subulatis, ramulis decumbentibus asperiusculis angulato-compressis. *Nobis in misc. nat. p.* 88.—*Hort. kew. ed.* 2. *v.* 3. *p.* 245.

Habitat C. B. S. G. H. ♄.

Floret Oct. A. M.

Cult. 1799.

Obs. *Flores* pulchri vivacissimè rubicundi, soli ardenti solum aperti.

M. (Thorn-leav'd) ramulis foliisque cylindricis subulatis spiniformibus erectis; apicibus subrecurvis, pedunculis carinisque bractearum scabriusculis. *Nobis in misc. nat. p.* 87.—*Hort. kew. ed.* 2. *v.* 3. *p.* *spiniforme.* 180. *
HABITAT C. B. S. G. H. ♄.
FLORET Sept. Oct. valde infrequens.
INTROD. circa 1793.
OBS. Corolla parvula, petalis læte rubicundis, basi pallidioribus.
β minus.

M. (Hook-leav'd) foliis confertis semicylindricis acuminatis, apice valde recurvis, ramulis erectis præconfertis. *M. aduncum. Nobis in miscel. nat. p.* 87.—*Hort. kew. ed.* 2. *v.* 3. *p.* 245. *aduncum.* 181. *
HABITAT C. B. S. G. H. ♃.
FLORET Feb. Mar. valde infrequens.
INTROD. 1795.
OBS. *Corolla* parva, petalis rubicundis apicibus saturatioribus.

M. (Thready-stemm'd) foliis confertissimis semicylindricis acuminatis, caulibus filiformibus cespitosis reptantibus.—*M. filicaule. Nobis in misc. nat. p.* 87.—*Hort. kew. ed.* 2. *v.* 3. *p.* 844. *filicaule.* 182. *
HABITAT C. B. S. G. H. ♄.
FLORET Sept. A. M. rarissimè.
OBS. *Flores* parvi pulchelli, *petalis* intus pallide rubicundis, extus saturatioribus præcipue ad apicem.

********** Rubicunda. *Ramis suffrutescentibus glabris foliis plus minus triquetris nudis absque papulis, apicibus rectis: petalis (M. serrato et M. dilatato exceptis) rubicundis.*

Obs. It will be perceived that I have attempted to improve the distribution of this and other difficult Sections; perhaps unsuccessfully; but with a view to enable the collector of these plants, to arrange them as naturally as possible. But it is well observed by adepts in botanic science, that nature has not always connected *species*, nor even genera, or orders, in continuation like the links of a chain; but rather in a tessellated manner, more analogous to the meshes of a net. *Non catenatim: sed reticulatim.* Those who have most laboured in this department, will alone feel the force of these remarks.

† Carinalia: *suffrutices, erecti, foliorum carinis valde conspicuis, sive auctis, rarissime integris.*

maximum. 183. * M. (great Crescent-leav'd) foliis confertis præcompresso-triquetris incurvo-lunulatis glaucissimis, caule lignoso.—*M. maximum. Nobis in misc. nat. p.* 68.—*Hort. kew. ed.* 2. *v.* 3. *p.* 233.

Habitat C. B. S. G. H. ♄.

Floret Mar. A. M.

Introd. 1787.

Obs. Non rectè hujus divisionis. Species anomala.

M. (Ragged-keel'd) foliis confertis glaucis compresso-triquetris acinaciformibus, carina cartilagineo-lacerata, petalis calyce magno longioribus inclaudentibus.—*M. lacerum. Nobis in misc. nat. p.* 66.—*Hort. kew. ed.* 2. *v.* 3. *p.* 234. *lacerum.* 184. *

HABITAT C. B. S. G. H. ♄.

FLORET Jun.

OBS. *Flores* magni speciosi rosei, semper aperti.

OBS. The showy flowers of this fine species have been sometimes worn as ornaments in the head-dresses of ladies, for which they are well calculated, on account of their not closing, like those of most other species; and being sufficiently succulent to bear pinning to the hair, &c. for many hours without withering or fading; which would happen to any but succulent flowers. The warmth and the light of a ball-room would show them off with considerable effect. Perhaps that vegetable diamond, the Ice plant, might be advantageously combined with them, especially by candle-light. M. lacerum is rather more impatient of cold than the other woody kinds.

M. (Saw-keel'd) foliis subulatis triquetris punctatis distinctis, angulo carinali retrorsum serrato, petalis luteis. *Willd. sp. pl.* 2. *p.* 1049.—*Nobis in misc. nat. p.* 68.—*M. serratum flore acetabuliformi flore luteo. Dill. elth. t.* 192. *f.* 238.—*Yellow Cape Fig-Marygold with a light notched leaf. Pet. gaz. p.* 8. *t.* 78. *f.* 2. *serratum.* 185. †

HABITAT C. B S. G. H. ♄.

FLORET Jun. Jul. *Dill. l. c.*

Cult. 1707, by Mr. Gardiner of the Temple Garden, and by Sherrard at Eltham, in 1732.

Obs. I have not yet seen this species, but it probably may still exist in some country collection.

heteropetalum. 186. * M. (Various-petal'd) foliis confertis glaucis falcato-acinaciformibus, angulis cartilagineis, carina lacera, petalis inæqualibus calyce magno brevioribus. *Nobis in misc. nat. p. 67.—Hort. kew. ed. 2. v. 3. p. 235.*

Habitat C. B. S. G. H. ♄.

Floret Mai.—Aug. A. M.

Introd. 1794.

α. Corollis albis exiguis.

β. Corollis rubicundis exiguis.

mutabile. 187. * M. (Changeable) foliis distinctis confertis triquetris punctatis, carina gibbosa, angulis integris cartilagineo-marginatis. *Nobis in misc. nat. p. 74.—Hort. kew. ed. 2. v. 3. p. 237.—Mesembr. filamentosum. Plant. grass. cum icone; nec aliorum.—M. forficatum. Jacq. hort. v. 1. t. 26.*

Habitat C. B. S. G. H. ♄.

Floret Jul.—Sept. A. M.

Cult. 1792.

Obs. *Flos* parvus inelegans, at major quam in præcedente.

Obs. 2. I purchased this species above twenty years ago, in a Yorkshire nursery, by the name of M. dolabriforme, minus.

marginatum. 188. * M. (White-edg'd) foliis triquetris subacinaciformibus, marginibus dealbatis, carina subdilatata.—*M. marginatum. Nobis in misc. nat. p. 73.—Hort. kew. ed. 2. v. 3. p. 237.*

HABITAT C. B. S. G. H. ♄.
FLORET....
INTROD. ante 1793.
OBS. Præcedenti multoties minus. *Suffrutex* pygmæus, subquadriuncialis, radice fibrosa. *Caulis* suberectus paulo ramosus. *Rami* erecti. *Folia* inter M. microphyllum et M. mutabile, albo marginata. *Misc. nat. l. c.*

M. (inclosing Delta-leav'd) foliis triquetris subdeltoidibus lævibus perviridibus, carina gibbosa, corollis inclaudentibus, petalis interioribus valde abbreviatis imbricatisque. *Nobis in bot. repos. v. 6.* 388. *inclaudens.* 189. *

In the above-cited page of *Bot. rep. M. rostratum* is mentioned as having flowered with Mr. Ross. This however was a mistake, as Mr. R.'s plant proved to be a new species; and is described above under the name of *M. bibracteatum.*
HABITAT C. B. S. G. H. ♄.
FLORET Jul.
INTROD. 1805.
OBS. *Flores* semper aperti, pulcherrimi, saturatissimè rubicundi, *petalis* latioribus quam in plurimis, nitidioribus magisque gradatim abbreviatis.
OBS. 2. This species is perhaps better calculated to be worn in the manner of an artificial flower, while yet alive, than M. lacerum above enumerated; as it is more beautiful, and far more shining: or they may be used together. And if fragrance is also wanted, any flowers of the division NOCTIFLORA will answer the purpose, during the evening or night; but the NOCTIFLORA are closed in the day-time.

The blossoms of the whole Section INCLAUDENTIA, are likewise applicable in an ornamental manner, but possess no scent.

caulescens. 190. M. (smooth-keel'd Delta) foliis perglaucis confertis triquetro-deltoidibus, lateribus minime dentatis, carina integra.—*M. caulescens. Mill. dict. ed.* 8. *no.* 12.—*Nobis in misc. nat. p.* 74. —*Hort. kew. ed.* 2. *v.* 3. *p.* 237.—*M. deltoides* γ. *Willd. sp. pl.* 2. *p.* 1052.—*M. deltoides* B. *simplex angulo carinali integro. Plant. grass. cum icone.*—*M. deltoides non dorso, sed lateribus muricatis. Dill. elth. t.* 195. *f.* 243, 244.

HABITAT C. B. S. G. H. ♄.

FLORET Mai. A. M.

CULT. 1731.

OBS. The numerous pale-rosy flowers of this and the two following species, smell agreeably when expanded, resembling the fragrance of White-thorn blossoms, or new made Hay.

deltoides. 191. M. (great Delta) foliis glaucissimis confertis triquetro-deltoidibus, lateribus carinaque dentatis, carina bractearum foliolisque calycinis integris.—*M. deltoides. Nobis in misc. nat. p.* 74.—*Hort. kew. ed.* 2. *v.* 3. *p.* 238.—*M. deltoides* β. *Willd. sp. pl.* 2. *p.* 1052.—*M. deltoides* A. *triplex, angulis tribus dentatis. Plant. grass. cum icone bono, excluso synonymo Dillen.* 246.—*M. deltoides et dorso et lateribus muricatis majus. Dill. elth.* 196. *f.* 245 *et* 247.

HABITAT C. B. S. G. H. ♄.

FLORET Mai. A. M.

CULT. 1731.

M. (small Delta) foliis confertissimis deltoidibus, bracteis foliolisque majoribus calycinis triquetris glaucis, et trifarie denticulatis. *Nobis in misc. nat. p.* 75.—*Hort. kew. ed.* 2. *v.* 3. *p.* 238.—*M. deltoides. Willd. sp. pl.* 2. *p.* 1052.—*M. deltoides* A. *triplex, angulis tribus dentatis. Plant. grass. absque icone, (excluso synonymo. Dill. elth. f.* 245, & 247.)—*M. deltoides et dorso et lateribus muricatis minus. Dill. elth. t.* 195. *f.* 246. *muricatum.* 192. *

HABITAT ad Caput Bonæ Spei. G. H. ♄.
FLORET Mai. A. M.
OBS. Præcedenti duplo minus.

†† MICROPHYLLA. *Suffrutices erecti, foliis parvis, et sæpius falcatis gracilibus, et sp. (prima excepta) glaucis. Flores parvuli.*

M. (Small-leav'd) foliis connatis triquetris acuminatis subaristatis punctatis perviridibus basi intus pustulatis, ramulisque confertissimis. *Nobis in misc. nat. p.* 73.—*Hort. kew. ed.* 2. *v.* 3. *p.* 237. *microphyllum.* 193. *

HABITAT C. B. S. G. H. ♄.
FLORET Mai. at rarissimè.
INTROD. ante 1795.
OBS. *Suffrutex* dodrantalis. *Corolla* parva pulchella, *petalis* saturatè rubicundis, interioribus setaceis, apice saturatioribus. *Antheræ* lutescentes. *Styli* quatuor sordide virides, apicibus patentibus subulatis. *Misc. nat. l. c.*
OBS. Foliorum carina subinde minutim serrulata.

M. (Mucronated) foliis connatis confertis glaucescentibus oblongo-ovatis acutis punctatis, apice triquetris mucronatis. *Nobis in misc. nat. p.* 73.—*Hort. kew. ed.* 2. *v.* 3. *p.* 237. *mucronatum.* 194. *

HABITAT C. B. S. G. H. ♄.
FLORET . . . .
INTROD. 1794.
OBS. *Suffrutex* ramosissimus 1—3-uncialis. *Folia* trilinearia.—A præcedente primo intuitu dignoscitur, *foliis* glaucescentibus mucrone niveo conspicuo. *Flores* non vidi.

pulchellum. 195. * M. (handsome Small-leav'd) foliis connatis valde confertis glaucis acute-triquetris cuspidatis, marginibus ciliato-pubescentibus, caulibus procumbentibus.—*M. pulchellum. Nobis in misc. nat. p.* 74.—*Hort. kew. ed.* 2. *v.* 3. *p.* 237.
HABITAT C. B. S. G. H. ♄.
FLORET Apr. A. M. at rarissimè.
INTROD. 1797.
OBS. *Corolla* parva pulchella, *petalis* intus pallidè rubicundis, apicibus extusque saturatioribus, inæqualibus, sæpe emarginatis. *Misc. nat. l. c.*

falcatum. 196. M. (small Sickle-leav'd) foliis minutis distinctis perglaucis falcatis compresso-triquetris, ramulis numerosis filiformibus.—*M. falcatum. Willd. sp. pl.* 2. *p.* 1046.—*Hort. kew. ed.* 2. *v.* 3. *p.* 236.—*Nobis in misc. nat. p.* 72.—*M. falcatum minimum, flore purpureo parvo. Dill. elth.* 288. *t.* 213. *f.* 275. & 276.—*Ficoides afric. folio triangulari ensiformi brevissimo, flore purpurascente. Bradl. succ.* 5. 9. *t.* 42.
HABITAT C. B. S. G. H. ♄.
FLORET Mai.—Jul.
CULT. 1727.
OBS. *Flores* parvuli numerosi rubicundi, fragrantes, ut in Cratægo Oxyacanthâ.

M. (Cluster-flower'd) foliis triquetris compressis glaucescentibus incurvis utraque attenuatis, pedunculis ramulisque filiformibus compressis erectis.—*M. glomeratum. Willd. sp. pl.* 2. p. 1046.—*Hort. kew. ed.* 2. *v.* 3. *p.* 235.—*M. falcatum minus, flore carneo minore. Dill. elth.* 281. *t.* 213. *f.* 274. *glomeratum.* 197.

HABITAT C. B. S. G. H. ♄.

FLORET Jun. Jul. copiosissimè fere omnium. A. M.

CULT. 1732.

OBS. This sometimes occurs in collections under the name of M. multiflorum, but it hardly possesses a single character of that species.

M. (thick Sickle-leav'd) foliis parvulis crassis acinaciformiter-falcatis grandi-punctatis glaucis. *falciforme.* 198. *

HABITAT C. B. S. G. H. ♄.

FLORET Jul. Aug. copiosè. A. M.

INTROD. circa 1805.

OBS. Communicavit Rev. Dom. Kirby.

Caules suffruticosi spithamei ramosi, demum decumbentes, cortice plus minusve rufo. *Flores* terminales subfastigiati, fragrantes ut in Oxyacanthâ, rubicundi sesquiunciales concinni. *Pedunculi* longiusculi teretes, superne incrassati. *Calyx* quinquefidus inæqualis laciniis minoribus membranâ magnâ præexustâ. *Petala* angustè linearia imbricata, apicibus inæqualibus, interiora valde diminuta. *Filamenta* alba erecta calyce breviora. *Antheræ* luteæ. *Styli* quinque *staminibus* breviores erecti crassi cuspidati, angulatim ramentacei. *Germen* turbinatum quinqueloculare.

††† Pallidiflora. *Foliis mediocribus glaucis glabris obtusè-triquetris falcato-incurvis punctatis, compressis: floribus paniculatis pallidè-rubicundis, majusculis.*

decumbens. 199. * M. (Decumbent) foliis triquetris compressis incurvis perglaucis, basi valde attenuatis, ramis teretibus decumbentibus robustulis.—*Mesemb. decumbens. Weston. catal.* 162.—*Mesemb. foliis acinaciformibus connatis lævibus, caule decumbente. Mill. dict. ed.* 7. *no.* 26.—*Nobis in misc. nat. p.* 69.—*Hort. kew. ed.* 2. *v.* 3. *p.* 234.

Habitat C. B. S. G. H. ♄.

Floret Mai.—Oct. A. M. copiosè.

Cult. ante 1759.

Obs. *Corolla* speciosa bipollicaris fere albicans, seu dilutissima omnium rubicundorum.

incurvum. 200. * M. (Incurved) foliis triquetris compressis perglaucis utraque attenuatis acinaciformibus, caule erecto, ramulis teretibus gracilibus effusis.—*M. incurvum. Nobis in misc. nat. p.* 69.—*Hort. kew. ed.* 2. *v.* 3. *p.* 235.

Habitat C. B. S. G. H. ♄.

Floret Jun. A. M.

Introd. 1802.

Obs. *Flores* magis rubicundi quam in præcedente, at simillimi. *Styli* quinque crassi valde ramentacei cuspide parva carnosa infra apicem. *Filamenta* alba brevia. *Antheræ* luteæ parvæ *stylorum* altitudine.

β. *(dilatans)* foliis triquetris incurvis subgracilibus glaucis, paucis infernè gibbosim-dilatantibus, senectissimis deflexis.

Habitat C. B. S. G. H. ♄.

Floret Sept. Oct. A. M.
Introd. circa 1805.
Obs. Communicavit Dom. Howard. Foliis minus glaucis fere duplo longioribus et crassioribus, singulariter subindè dilatantibus; floribus pallidè rubicundis speciosis. Forte propria species.
Obs. 2. I have another variety with paler flowers.

M. (Crowded-leav'd) foliis triquetris confertis robustis incurvis glaucis, caule erecto valde ramoso. *confertum.* 201. *
Habitat C. B. S. G. H. ♄.
Floret Sept. Oct. A. M.
Introd. circa 1805.
Obs. Communicavit Dom. Howard. *Frutex* erectus dense ramosus. *Folia* breviora at crassiora glauciora longeque confertiora quam in ultimo, ramis numerosioribus. *Flores* speciosi pallidè rubicundi numerosi.
Obs. 2. *Folia* subinde medio dilatantia, fere ut in var. β præcedentis.

†††† Teretiuscula. *Frutices erecti, foliis triquetro-teretiusculis glaucis, floribus rubicundis (ultimo excepto).*

M. (Upright shrubby) foliis subconfertis teretitriquetris subulatis incurvis glaucis basi marginatis.—*M. stipulaceum. Willd. sp. pl.* 2. *p.* 1040. *Hort. kew. ed.* 2. *v.* 3. *p.* 223.—*Nobis in miscel. nat. p.* 65 —*Mesemb. frutescens, flore purpureo rariore. Dill. elth.* 279. *t.* 209. *f.* 267 *et* 268. *stipulaceum.* 202.
Habitat C. B. S. G. H. ♄.
Floret Mai. Jun.—Oct. rarius. A. M.
Cult. 1723.

OBS. *Flores* subsolitarii terminales speciosi bipollicares læte rubicundi, infra pallidiores.

Haworthii. 203. M. (Haworth's) foliis subconfertis subulatis tereti-triquetris subincurvatis glaucis.—*M. Haworthii. Donn. hort. cantab. ed.* 2—6. *p.* 66. —*Nobis in misc. nat. p.* 65.—*Hort. kew. ed.* 2. *v.* 3. *p.* 233.

HABITAT C. B. S. G. H. ♄.

FLORET Jun.—Jan. A, M.

CULT. 1793.

OBS. Frutex erectus bipedalis. *Flores* terminales subsolitarii magni tripollicares, rubicundi basi albi. *Styli* quinque brevissimi robusti.

læve. 204. M. (White-wooded) foliis confertis cylindraceis obtusis arcuatis perglaucis, calycibus quinquefidis laciniis oblongis obtusis. *Nobis in misc. nat. p.* 64.—*M. læve, foliis cylindraceis obtusis amplexicaulibus lævibus, calycibus quinquefidis, laciniis oblongis obtusis. (Corolla purpurea.) Willd. sp. pl.* 2. *p.* 1044?—*Hort. kew. ed.* 1. *v.* 2. *p.* 187?—*M. (corallinum) foliis teretibus glabris, caule stricto ramosissimo, floribus albis. Thunb. prod.* 89?

HABITAT C. B. S. G. H. ♄.

FLORES non vidi.

INTROD. 1774.

OBS. This species strikes less easily from cuttings than most others, and although possessed of stiff upright woody shoots of one or two feet in height, never survives the third winter with me; but rarely dies under that age; and then appears to perish first at the root; for the branches survive many weeks after the root is dead. I have not heard of its flowering any where; nor is its bark white, but fus-

cous, which now causes me to doubt its being the true M. læve of Hort. kew. above cited. Perhaps if watered in a pan only in winter, and sparingly, and not on the top of its pot, it might survive longer, and then produce its flowers.

M. (Thorny) foliis triquetro-teretibus punctatis distinctis, spinis ramosis terminalibus.—*M. spinosum. Willd. sp. pl.* 2. *p.* 1047.—*Hort. kew. ed.* 2. *v.* 3. *p.* 233.—*Nobis in misc. nat. p.* 66.—*M. fruticescens, ramis triacanthis. Dill. elth.* 276. *t.* 208. *f.* 265.—*Ficoides africana, aculeis longissimis et foliolis nascentibus e foliorum alis. Bradl. succ.* 41. *t.* 39. *spinosum.* 205.

HABITAT C. B. S. G. H. ♄.

FLORET Jun.—Sept. A. M.

CULT. 1714.

OBS. *Frutex* bipedalis ramis duris. *Spini* præsingulares in hoc genere, subtrichotomi; primo terminales, mox laterales, durissimi. *Flores* parvi rubicundi.

M. (Dilated) foliis glaucis compresso-triquetris flexo-recurvantibus, angulo carinali post medium sæpe dilatato. *Nobis in misc. nat. p.* 68.—*Hort. kew. ed.* 2. *v.* 3. *p.* 234. *dilatatum.* 206. *

HABITAT C. B. S. G. H. ♄.

FLORET Jul. A. M. at infrequens.

CULT. 1795.

OBS. *Frutex* erectus tripedalis, ramis duris. *Flores* terminales ternati minuti, *petalis* uniserialibus argenteo-albis lucidis. Non rectè hujus divisionis, nempe fere anomalum.

AIZOON. *Gen. pl.* 861.

Calyx 5-partitus. *Petala* 0. *Capsula* supera, 5-locularis, 5-valvis.

canariense. 1. A. (Purslane-leav'd) foliis cuneiformi-ovatis, floribus sessilibus. *Willd. sp. pl.* 2. *p.* 1053. —*Hort. kew. ed.* 2. *v.* 3. *p.* 253.—*Plant. grass. cum icone.*—*Bot. repos.* 201.
Habitat in Canariis. G. H. ♄.
Floret Jun.—Sept.
Cult. 1732.

Glinoides. 2. A. (Hairy-leav'd) foliis subrotundo-cuneiformibus pilosis floribus sessilibus, calycibus hirsutis. *Willd. sp. pl.* 2. *p.* 1053.—*Hort. kew ed.* 2. *v.* 3. *p.* 253.
Habitat C. B. S. G. H. ♄.
Floret Jun.—Aug.
Introd. 1774.

hispanicum. 3. A. (Spanish) foliis lanceolatis, floribus sessilibus. *Willd. sp. pl.* 2. 1054.—*Hort. kew. ed.* 2. *v.* 3. *p.* 253.—*Plant. grass. cum icone.* —*Ficoidea hispanica annua, folio longiore. Dill. elth.* 143. *t.* 117. *f.* 143.
Habitat in Hispania, Africa. G. H. ⊙.
Floret Jul. Aug.
Cult. 1728.

lanceolatum. 4. A. (Panicled) foliis lanceolatis floribus paniculatis. *Willd. sp. pl.* 2. *p.* 1054.—*Hort. kew. ed.* 2. *v.* 3. *p.* 253.—*Aizoon foliis lanceolatis subtus hirsutis. Royen. lugb.* 221.—*Aizoon paniculatum. Mill. dict. ed.* 8. *no.* 3.
Habitat C. B. S. G. H. ♂.
Floret Aug.
Cult. 1752.

MONADELPHIA

HEPTANDRIA.

PELARGONIUM. *Hort. kew. ed.* 1. *v.* 2. *p.* 417.—*Geranium Linn.*

Calyx 5-partitus: lacinia suprema desinente in tubulum capillarem nectariferum secus pedunculum decurrentem. *Corolla* 5-petala irregularis. *Filamenta* decem inæqualia, quorum 3, (raro 5) castrata. *Arilli* 5 monospermi aristati ad basin *receptaculi* rostrati, *aristis* spiralibus barbatis.

* *Caulibus foliisve simplicibus, carnosis.*

P. (Central-stalk'd) foliis obsolete cordatis peltatis mollissime pubescentibus, variabiliter glauco-nitentibus, petiolis villosis, caule carnoso ramoso arboreo, ramis subsimplicibus, apice excepto defoliatis. *discipes.* 1. *

Habitat in Africa? S. ♄.

Floret ....

Introd. ante 1808.

Obs. The leaves have a most singular, and, in different lights, changeable glaucous colour, which I recollect no other vegetable instance of.

P. (Cotyledon) umbellis compositis, foliis cordatis peltatis rugosis pubescentibus subtus tomentosis, caule crasso carnoso nudo. *Willd.* *Cotyledonis.* 2.

sp. pl. 3. p. 674.—P. (cotyledonis) umbellis compositis, foliis cordatis peltatis rugosis, caule carnoso. Hort. kew. ed. 1. v. 3. p. 428. —L'Herit. geran. t. 27. (Not having this work, I cite it in this genus from Willd. and Hort. kew.)

HABITAT in Insula St. Helenæ, et ad Caput Bonæ Spei. S. ♄.

FLORET ....

INTROD. 1765.

crassicaule. 3. P. (Thick-stalk'd) umbellis multifloris, foliis reniformibus obacuminatis, caule carnoso ramoso lævi. *Willd. sp. pl. 3. p. 668.—Hort. kew. ed. 1. v. 2. p. 428.—L'Herit. geran. t. 26.*

HABITAT in Africæ australis littoribus occidentalibus. St. ♄.

FLORET Jul.

INTROD. 1786.

α. Floribus albis, caule semipedali.

β. Floribus albis quinque maculis pulcherrimis nigricantibus, caule pedali.

Cortusæfolium. 4. P. (Cortusa-leav'd) umbellis multifloris, foliis cordatis inciso-lobatis undatis obtuse dentatis, stipulis subulatis. *Willd. sp. pl. 3. p. 672.—Hort. kew. ed. 1. v. 2. p. 428.—L'Herit. geran. t. 45.*

α. Foliorum dentibus obtusis, floribus albis, purpureo parum maculatis.

β. Foliorum dentibus acutis.

HABITAT cum priore. St. ♄.

FLORET Jul.

INTROD. 1786.

echinatum. 5. P. (Prickly-stem'd) umbellis multifloris, foliis ovato-cordatis sublobatis crenatis, caule cras-

so carnoso, stipulis persistentibus spinescentibus tecto. *Willd. sp. pl.* 3. *p.* 675.—*Bot. magaz. t.* 309.—*P. (hamatum) caule carnoso, floribus umbellatis, foliis cordatis trilobis mollibus, stipulis subulatis recurvis spinæformibus. Jacq. hort. schœnbr.* 2. *p.* 7. *t.* 138.

HABITAT C. B. S. S. ♄.

FLORET Mai.—Aug.

INTROD. 1791.

α. Flore albo, maculis quinque nigricantibus. *Jacq. l. c.*

β. Flore purpureo, maculis quinque saturatioribus.

P. (Kidney-leav'd) foliis reniformibus, crenato-dentatis, tomentosis; floribus heptandris, subquaternis, purpureis; caule fruticoso, subcarnoso. *Bot. repos. cum tab.* 108. *reniforme.* 6.

HABITAT C. B. S. St. ♄.

FLORET Jul.—Sept.

INTROD. 1791.

α. Foliis reniformibus minoribus.

β. Foliis reniformibus lobatis majoribus.

γ. Foliis subreniformibus lobatis crispo-undatis longioribus, quasi adulteratis a Pelargonio capitato: floribus pulcherrimis pallidioribus.

P. (Ivy-leav'd) umbellis paucifloris, foliis quinquelobis integerrimis carnosis peltatis, ramis angulatis. *Willd. sp. pl.* 3. *p.* 669.—*Hort. kew. ed.* 1. *v.* 2. *p.* 427.—*Bot. magaz. t.* 20. —*Cavan. diss.* 4. 232. *t.* 100. *f.* 1. *peltatum.* 7.

HABITAT C. B. S. G. H. ♄.

FLORET Jun.—Aug.

CULT. 1701.

β. Foliis variegatis.

OBS. Folia zonâ nigrâ seu fuscâ notata.

tetragonum. 8. P. (Square-stalk'd) pedunculis bifloris, ramis tetragonis carnosis, corollis tetrapetalis.—*Willd. sp. pl.* 3. *p.* 669.—*Hort. kew. ed.* 1. *v* 2. *p.* 427.—*L'Herit. geran. t.* 23.—*Bot. magaz. t.* 136.—*Plant. grass. cum icone*—*Geranium caule tetragono fruticoso, foliis lobatis carnosis, pedunculis bifloris, corollis tetrapetalis. Cavan. diss.* 4. *p.* 231. *t.* 99. *f.* 2.—*Geranium (trigonum) pedunculis bifloris, corollis tetrapetalis, caule fruticuloso angulato, foliis petiolisque pilosis. Scopol. del.* 1. *p.* 12. *t.* 5.

HABITAT C. B. S. St. ♄.

FLORET Jun.—Aug.

INTROD. 1774.

β. Foliis variegatis.

γ. Ramis junioribus eleganter variegatis.

** *Caulibus, foliisve divisis, carnosis.*

gibbosum. 9. P. (Gouty) umbellis multifloris, foliis ternatis, foliolis obtusis inciso-dentatis, intermedio cuneato petiolato trifido, caule nodoso nodis tumidis. *Willd. sp. pl.* 3. *p.* 684.—*Hort. kew. ed.* 1. *v.* 2. *p.* 422.—*Geranium (gibbosum) caule fruticoso carnoso, geniculis gibbosis, foliis pinnato-lobatis glaucis, corollis luteo-viridibus. Cavan. diss.* 4. *p.* 265. *t.* 109. *f.* 1.

HABITAT C. B. S. G. H. ♄.

FLORET Jul. Aug.

CULT. 1722.

carnosum. 10. P. (Fleshy-stem'd) umbellis multifloris, foliis sinuato pinnatifidis, laciniis oblongis obtusis apice inciso-dentatis, petalis linearibus, caule crasso-carnoso. *Willd. sp. pl.* 3. 686.—*Hort. kew. ed.* 1. *v.* 2. *p.* 421.—*Geranium (carnosum) calycibus monophyllis, caule fruticoso,*

articulis carnoso-gibbosis, foliis pinnatifidis laciniatis, petalis linearibus. Cavan. diss. 4. *p.* 266. *t.* 99. *f.* 1.
HABITAT C. B. S. G. H. ♄.
FLORET Jun.—Aug.
CULT. 1724.

P. (Horn-leav'd) umbellis multifloris, foliis remotis carnosis teretibus, laciniis canaliculatis obsolete trifidis. *Willd. sp. pl.* 3. *p.* 688.—*Hort. kew. ed.* 1. *v.* 2. *p.* 422—*L'Herit. geran. t.* 13.—*Bot. mag. t.* 315. *ceratophyllum.* 11.
HABITAT C. B. S. S. ⊙.
FLORET Mai.
INTROD. 1786.
β. Foliorum laciniis pinnatifidis.

P. (Thick-stem'd) foliis subbipinnatifidis, pinnulis oblongis obtusissimis apice trifidis, caule senecto ramoso crasso carnoso pedali. *dasycaule.* 12. *
HABITAT C. B. S? G. H. ♄.
FLORET Aug.
INTROD. circa 1795.
OBS. Caulis fere æquali crassitie, et ad vestigia foliorum parum gibberulus. *Folia* lævia carnosa viridia, pinnata, pinnis profunde pinnatifidis, superioribus per petiolum communem decurrentibus, pinnulis truncatis apice sæpius trilobis trifidisve. A præcedente primo intuitu dignoscitur foliis bipinnatifidis; a sequente, foliolis latioribus cauleque humiliore magisque ramoso.
OBS. 2. Petioli inferne teretes, superne canaliculati e decursu pinnularum. *

P. (Samphire-leav'd) umbellis multifloris paniculatis, foliis bipinnatis carnosis apice dilatatis incisis, petalis obtusis, superioribus basi cris- *Crithmifolium.* 13.

pis. *Willd. sp. pl.* 3. *p.* 688.—*Smith. ic. pict.* 1. *p.* 13. *t.* 13.
HABITAT C. B. S. St. ♄.
FLORET Mai.—Jul.
INTROD. 1786.

alternans. 14. P. (Parsley-leav'd) umbellis paucifloris, foliis pinnatis, foliolis petiolatis suboppositis cuneiformibus apice inciso-dentatis. *Willd. sp. pl.* 3. *p.* 688.
HABITAT C. B. S. G. H. ♄.
FLORET Mai.—Aug.
INTROD. 1791.

tenuifolium. 15. P. (Fine-leav'd) umbellis multifloris, foliis bipinnato-supradecompositis hirsutis, foliolis lineari subulatis, caule carnoso nudo erecto. *Willd. sp. pl.* 3. *p.* 689.—*Hort. kew. ed.* 1. *v.* 2. *p.* 421.
HABITAT C. B. S. G. H. ♄.
FLORET Jul. Aug.
INTROD. 1768.

Abrotanifolium. 16. P. (Southernwood-leav'd) umbellis paucifloris, foliis digitato-pinnatis, foliolis linearibus trifidis. *Willd. sp. pl.* 3. *p.* 688.—*Geranium (Abrotanifolium) caule fruticoso, foliis minimis ternatis trifidis laciniis linearibus, floribus umbellatis.* *Cav. diss.* 4. *p.* 256. *t.* 117. *f.* 1.
HABITAT C. B. S. G. H. ♄.
FLORET Jul. Aug.
CULT. ante 1808.
OBS. Neither this (which is new to our gardens) nor the preceding article can be strictly called succulent plants, although they require the same treatment; but from their close affinity

to, and semideciduous habit of most of the foregoing species of this genus, it was judged best to add them.

Nevertheless, all the tuberous tribes are omitted, lest we should have admitted along with them every other tuberous, and even bulbous plant. Somewhere the line must be drawn, between what are, and what are not succulent; and the present should seem the proper place. The tuberous Gerania constitute a genus of themselves, the limits of which I have not yet ascertained, owing to the difficulty of obtaining suitable specimens; but have still meditated a monograph concerning them, and indeed the whole order; and the reduction of the factitious mungrels pertaining to it, which our gardens are inundated with, (shamefully excluding the original species) to some fixed points. But the poor encouragements such labours meet have hitherto continually discouraged me.

MONSONIA.

Calyx quinquephyllus. *Corolla* quinquepetala, incisa. *Stamina* 15, connata, (monadelpha) urceolo filamentorum quinquefido. *Stylus* quinquefidus. *Arilli* 5, monospermi, aristati, ad basin receptaculi rostrati. *Persoon. synops.* 2. 238.

M. (Thorny) foliis ellipticis acuminatis integerrimis, petiolis persistentibus spinescentibus, petalis subdentatis. *Pers. syn.* 2. *p.* 238.—*Willd. sp. pl. tom.* 3. *p.* 719.—*L'Herit. geran. t.* 42.—*Geranium spinosum. Paterson's journ. cum tabula.* *spinosa.* 1.

Habitat C. B. S. S. ♄.
Floret . . . .
Introd. 1790.
Obs. I have seen this remarkable plant alive in the matchless gardens of Kew; but it is not at present to be found there, or elsewhere in Britain.

Classis XIX.

SYNGENESIA

ÆQUALIS.

KLEINIA. (*Linn. in hort. cliff.*)—*Cacalia Linn. &c.*

Flores discoidei. *Calyx* cylindricus, basi tantum subbracteolatus. *Receptaculum* nudum. *Pappus* pilosus.

Obs. *Caulis* fruticosus, *foliaque* succulenta glauca, intus resinosa.

Nereifolia. 1. K. (Oleander-leav'd) caule fruticoso, foliis lanceolatis planis, floribus corymbosis. *Willd. sp. pl.* 3. 726. *(Cacalia Kleinia.)*—*Kleinia, foliis lanceolatis planis, caule lævi ventricoso. Linn. hort. cliff.* 395.—*Plant. grass. cum icone.*—*Cacalianthemum folio nerii glauco. Dill. elth.* 61. *t.* 54. *f.* 2.

HABITAT in Canariis. G. H. ♄.
FLORET Sept. Oct.
CULT. 1732.
OBS. The original Linnæan name of Kleinia ought to be restored to this plant and its allies. But I am not certain the following ought to associate with it, as some of them have calyxes much more numerously divided.—Cacalia, as it at present stands, is an heterogeneous mass.

K. (Rugged) caule fruticoso papillis cylindraceis truncatis petiolaribus obsito, foliis lanceolatis planis. *Willd. sp. pl.* 3. *p.* 1725.—*(Cacalia papillaris) Kleinia caule carnoso, petiolis truncatis obvallato. Linn. hort. cliff.* 395.—*Cacalianthemum caudice papillari. Dill. elth.* 63. *t.* 55. *f.* 63. *papillaris.* 2.
HABITAT C. B. S. G. H. ♄.
FLORET....
CULT. 1727.

K. (Fig-marygold) caule fruticoso, foliis compressis, carnosis. *Willd. sp. pl.* 3. *p.* 1727.—*(Cacalia Ficoides).—Kleinia foliis carnosis lanceolatis compressis, caule tereti. Linn. hort. cliff.* 395.—*Senecio africana arborescens: ficoidis folio et facie. Comm. rar.* 40. *t.* 40.—*Bradl. succ.* 5. *p.* 11. *t.* 49. *Ficoides.* 3.
HABITAT C. B. S. G. H. ♄.
FLORET Jun.—Nov.
CULT. 1727.

K. (Creeping-rooted) caule fruticoso, foliis depressis carnosis. *Willd. sp. pl.* 3. 1727.—*(Cacalia repens) Thunb. prod.* 141.—*Plant. grass. cum icone.* *repens.* 4.
HABITAT C. B. S. G. H. ♄.

FLORET Jun.—Oct.

INTROD. 1759.

Planta tota structura simillima C. Ficoides, etiam rore glauco obducta, sed *Folia* supra depresso-concava, nec lateribus compressa. *Radix* repens. *Willd. l. c.*

OBS. Plantæ senectæ solum florent. *Pedunculi* prælongi subbifidi, rarius subcorymbosi parum bracteolati, demum laterales axillaresve. *Calyx* campanulatus flosculis farctus irregulariter rumpens.

tomentosa. 5. * K. (Woolly) foliis alternis carnosis teretibus utrinque attenuatis, caulibusque prætomentosis.—*Cacalia (tomentosa).—Nobis in misc. nat. p.* 189.

HABITAT C. B. S. G.H. ♄.

FLORET ....

INTROD. 1795.

OBS. This extraordinary plant has not yet produced any flowers with me. It is completely enveloped in a short dense skin-like cover of cottony wool, which is even capable of being stripped off the leaves like a skin, leaving the leaves themselves green after being divested of it. This cotton, if lighted in the flame of a candle, &c. slowly consumes in the manner of touch paper; owing to the resinous quality this genus abounds in. C. tomentosa is capable of living very long without water, as are also other woolly succulents, &c.—Vide remarks on this head in *Miscellanea naturalia, p.* 203.

Anteuphorbium. 6. K. (Oval-leav'd) caule fruticoso, foliis ovato-oblongis planis, petiolis basi linea triplici deductis. *Willd. sp. pl.* 3. *p.* 1725. *(Cacalia*

Anteuphorbia)—Ante Euphorbium. Dill. elth. 63. *t.* 55. *f.* 2. 3.
HABITAT C. B. S. G. H. ♄.
FLORET Feb. Mar. rarissimè.
CULT. 1596.
OBS. *Flores* terminales sessiles sæpius solitarii miseri, calycibus multifidis.

K. (Fleshy) caule fruticoso, foliis teretiusculis carnosis incurvis, pedunculis terminalibus unifloris nudis. *Hort. kew. ed.* 1. *v.* 2. *p.* 156. —*(Cacalia carnosa) Willd. sp. pl.* 3. *p.* 1727. *carnosa.* 7.
HABITAT C. B. S. G. H. ♄.
FLORET ....
INTROD. ....
An sequentis generis? *Flores* non vidi.

K? (Jointed) caule fruticoso, foliis carnosis planis ternatis, foliolis trilobis. *Willd. sp. pl.* 3. *p.* 1727. *(Cacalia articulata.)—Cacalia (laciniata) caule fruticoso, carnoso, articulato; foliis ternato-pinnatifidis, obsoletis. Plant. grass.* 18. *cum icone.—Jacq. hort. vind.* 1. 168.—*Cacalia (runcinata) caule fruticoso, foliis petiolatis planis, hastato-runcinatis carnosis glaucis. Lamarck. encycl.* 1. *p.* 523. *articulata.* 8.
HABITAT C. B. S. G. H. ♄.
FLORET Sept.—Nov. infrequens.
INTROD. 1775.

OTHONNA.

Calyx 1-phyllus multifidus, subcylindricus. *Recept.* nudum. *Pappus* subnullus. *Persoon. synops.* 2. 496.

O. (Fig-marygold-leav'd) foliis filiformibus carnosis, caule fruticoso. *Linn. mant.* 118.—*Hort. kew.* 3. 277.—*Persoon. synops. ex-* *tenuissima.* 1.

cluso synon. Jacq. schœn.—Cacalia cylindrica. Plant. grass. cum icone.

HABITAT C. B. S. G. H. ♃.

FLORET Apr. Mai. rariss.

INTROD. 1774.

OBS. Perhaps it does not belong to this genus, receding in its leaves and subverticillated branches, and in having but 6 or 7 divisions in the calyx, revolute petals, (except to a hot sun) and long, nearly naked pappus—cuneate-oblong, concave truncate germina, with (in the glass) minutely crenulate, and distinct coronary margins. The cymes of its rare yellow flowers resemble those of a Cineraria.

Classis XXI.

MONOECIA

POLYANDRIA.

BEGONIA. *Gen. plant.*

MAS. *Calyx* 0. *Corolla* 4-petala: *petalis* duobus oppositis majoribus. *Stamina* numerosa. FŒM. ut in mare. *Styli* 3, bifidi. *Capsula* infera, triangularis, alata, trilocularis, polysperma. (*Folia* sæpius obliqua.) *Pers. synops.* 2. *p.* 564.

OBS. Ordo naturalis Hydrocharides.

* *Foliis cordatis.*

B. (Shining) fruticosa erecta, foliis glaberrimis inæqualiter cordatis obsolete dentatis, capsula ala maxima subrotunda. *Dryand. in linn. soc. tr. v.* 1. *p.* 159.—*Pers. synops. v.* 2. *p* 564.—*Hort. kew. ed.* 1. *v.* 3. *p.* 352.—*Begonia obliqua. L'Herit. stirp. nov. p.* 95. *t.* 46.—*Begonia minor. Jacq. collect. v.* 1. *p.* 126. *nitida.* 1.

HABITAT in Jamaica. S. ♄.
FLORET Mai.—Dec.
INTROD. 1777.

B. (Forked) fruticosa erecta, foliis inæqualiter cordatis subangulatis glabris subtus ad venas subhirsutis, panicula dichotoma, capsula ala maxima acutangula reliquis parallelis acutangulis. *Pers. synops. v.* 2. *p.* 564.—*Donn. hort. cantab. ed.* 6. *p.* 246. *dichotoma.* 2.

HABITAT in sylvis humidis ad Caraccas. S. ♄.
FLORET Jul. Aug.
INTROD. ante 1810.

B. (Broad-leav'd) foliis inæqualiter cordatis crenato-dentatis, inferioribus angulatis, capsula alis obtusangulis una maxima. *Dryand. in linn. soc. tr. v.* 1. *p.* 164.—*Persoon. synops. v.* 2. *p.* 564.—*B. grandifolia. Jacq. collectan. v.* 1. *p.* 128. *(excluso synonymo Brownei.)* *macrophylla.* 3.

HABITAT in montibus Jamaicæ. S. ♄.
FLORET Mai.—Dec.
INTROD. 1794.

B. (Tuberous) repens, foliis inæqualiter cordatis angulatis dentatis, capsulæ alis parallelis. *Dryand. in linn. soc. tr. v.* 1. *p.* 168.—*Pers.* *tuberosa.* 4.

synops. 3. *p.* 564.—*Donn. hort. cantab. ed.* 6. *p.* 246.—*Rumph. v.* 5. *t.* 169. *f.* 2.
HABITAT in saxosis insulæ Amboynæ—Celebes.
FLORET Jul.—Sept. S. ♄.
INTROD. ante 1810.

Evansiana. 5. B. (Two-colour'd) foliis inæqualibus cordatis, supra hispidulis, nitidis margine inæqualibus, acutis serrulatis; petalis duobus late ovatis, duobus obovatis quadruplo majoribus: caulibus flexuoso-erectis, nodosis: axillis bulbiferis. *Bot. repos. tab.* 627.
HABITAT in China. G. H. ♃. s. ♄.
FLORET Jun.—Sept.
INTROD. 1804.
OBS. Species pulcherrima, foliis subtus saturatè rubris.

** *Foliis semicordatis.*

acuminata. 6. B. (Sharp-leav'd) foliis hispidis semicordatis acuminatis inæqualiter dentatis, capsulis ala maxima obtusangula, reliquis acutangulis. *Dryand. in linn. soc. tr. v.* 1. *p.* 166. *t.* 14. *f.* 5. 6.—*Persoon. synops. v.* 2. *p.* 564.
HABITAT in Jamaicæ montibus cæruleis. S. ♄.
FLORET Mai.—Dec.
INTROD. 1791.

humilis. 7. B. (Humble) erecta, foliis hispidis semicordatis duplicato-serratis, capsulis alis rotundatis parum inæqualibus. *Dryand. in linn. soc. tr. v.* 1. *p.* 166. *t.* 15.—*Persoon. synops. v.* 2. *p.* 564.—*Donn. hort. cantab. ed.* 6. *p.* 246.
HABITAT in insula Trinitatis. S. ♂.
FLORET Jul.—Sept.
INTROD. 1788.

B. (Hairy) caulescens, foliis hispidis semicordatis duplicato-serratis, capsulæ ala maxima obtusangula, reliquis parallelis minimis. *Dryand. in linn. soc. tr. v.* 1. *p.* 167.—*Persoon. synops. tom.* 2. *p.* 564.—*Begonia hirsuta. Aubl. guian.* 913. *t.* 348. *hirsuta.* 8.

HABITAT in Guianæ rupibus.

FLORET ....

INTROD. ante 1810.

IT may be wondered at by some why Willdenow's last volume is not cited in these latter pages; and by others why the Linnæan arrangement is preferred to NATURAL ORDERS.—The former are answered by saying, I have not that volume, nor thought it material to borrow it:—the latter, by observing that the method of Linnæus is most convenient for small lists of plants; but for all general and extensive distributions, the *natural arrangement* is as preferable to it, as the sun is to the moon.

APPENDIX.

I TAKE the present opportunity of making a few supplementary additions to the fourth and fifth Dissertations of *Miscellanea naturalia*; the preceding pages having already acted as such to the former three. The Saxifragæ there described appear to form many genera.—S. sarmentosa, S. crassifolia and cordifolia, I had separated; but as the former is published by Duval under the name of Ligularia; and the latter, as my friend R. A. Salisbury informs me, also as a genus, in some other work, it is unnecessary to dwell further on them here; but the following have not until now been considered as generically distinct.

MICRANTHES.

Calyx 5-partitus laciniis arctissimè refractis. *Corolla* 5-petala, petalis remotis loratis virescentibus absque unguiculis. *Filamenta* uniformia depresso-plana, petalis breviora. *Germen* superum. *Capsula* birostris unilocularis polysperma. *Herbæ* perennes, foliis oblongis dentatis ciliatis. *Scapi* elati fistulosi aphylli subviscoso-pubescentes. *Flores* paniculati subcapitulato conferti præexigui immunes.—*Saxifraga Linn. &c.*

M. (Semipubescent) foliis lanceolatis crassiusculis minutissime repando-crenulatis, supra nudis aveniis, subtus margineque pubescentibus. *semipubescens.* 1. *

HABITAT.... H. ♃.

FLORET Mai. Jun.

OBS. Differs generically as above; and specifically from Saxifraga pensylvanica of Linnæus and Dillenius, in the leaves being very obsoletely crenulated, (not sharply dentated,) darker green, nearly veinless and downy beneath, (not light green strongly veined and naked,) and in having shorter scapes, larger, and less crowded flowers.—Sax. Hieracifolia also belongs to this genus.

ROBERTSONIA.

Calyx 5-partitus, laciniis arctissimè refractis. *Corolla* 5-petala, petalis unguiculatis. *Filamenta* teretia basi gracillima, petalorum longitudine superne valde incrassata. *Germen* superum. *Capsula* 2-rostris 1-locularis, polysperma. *Herbæ* perennes, foliis rotundatis, rarius cuneatis oblongisve, semper dentatis seu crenatis. *Scapi* solidi aphylli effuso-paniculati. *Flores* parvi albi petalis luteo rubrove perlepidè punctatis.—*Saxifraga Linn. &c.*

This genus is named in honour of the late Benjamin Robertson, who left his whole fortune by will (sadly for the science of Botany, annulled by Lord Chancellor Eldon) to trustees, to form a Botanic Garden of vast extent.—"Exemplum rarum et inauditum"—"Tantus amor florum." (See *Misc. nat.* 190.)—The plants called "London's Pride, None-so-

pretty, &c." belong to this genus, and their names are perfectly typical of this gentleman's spirit in the cause of Botany.—The following are presumed to be new species.

Micranthidifolia. 1. * R. (Oblong leav'd) foliis alatim petiolatis lanceolato-oblongis obtusis altè dentato-serratis hirtis, petalis macula flava, filamentis pedunculatis, stylis subulatis acutis.

Habitat in Carolina.—Introduxit, communicavit Dom. Fraser anno 1810.

Floret Mai. copiosè. H. ♃.

serrata. 2. * R. (Sawed) hirtula, foliis obovato-cuneatis rigidis argute serratis, paginis glabris nudis.

Obs. S. punctatæ simillima, at foliis angustioribus, serraturis profundioribus acutioribus.

Habitat in Hibernia. H. ♃.

Floret Mai.

polita. 3. * R. (Polish'd) hirta, foliis reniformibus rotundis argute dentatis, paginis nudis lævigatis.

Obs. S. punctatæ affinis, at major, foliis omnino diversis.

β. Minor, ex montibus Scotiæ.

Floret Mai. H. ♃.

sphæroidea. 4. * R. (Sphæroidal) hirta, foliis reniformi-sphæroideis obtuse crenatis, paginis utrinque nudis lævibus.

Obs. Affinis S. hirsutæ Linn. at triplo minor, et differt foliis nudis crenatis; nec hirsutis dentatis.

Habitat . . . . H. ♃.

Floret Mai.

Introd. circa 1800.

crenata. 5. * R. (Crenated) hirtula, foliis reniformibus rotundis, obtuse crenatis.

Obs. Major quam S. Geo, minus hirsuta, foliis crenatis nec dentatis, floribus sanguineo flavoque perlepidè punctatis.
Habitat .... S. ♃.
Floret Mai.
Introd. ante 1796.

R. (Tooth'd) hirtula, foliis reniformibus rotundis crenato-dentatis, petalis sanguineo flavoque punctatis. *dentata.* 6. *
Obs. S. Geo nimis affinis, at minus hirta, foliis minus argute dentatis, numerosioribus, et forsan minoribus, floribus sanguineo flavoque punctatis. Plantæ etiam longiores, minus erectæ.
Habitat in Scotiæ montibus. H. ♃.
Floret Mai.

MISCOPETALUM.

Calyx 5-partitus erectus. *Corolla* 5-petala, petalis oblongo-lanceolatis pedunculatis rubro-punctatis. *Filamenta* filiformia non incrassata. *Germen* superum. Cætera Saxifragæ. *Folia* rotundo-reniformia argute dentata hyeme marcescentia. *Scapus* solidus foliosus paniculatus.

M. (Round-leav'd) *Saxifraga rotundifolia. Linn. &c.* *rotundifolium.* 1.
Obs. It appears to differ from Saxifraga in its petiolated (not sessile) petals and superior germen;—from Micranthes in its petals, and erect (not refracted) calyx; and from Robertsonia again in its calyx and petals, and filiform (not obattenuated) filaments.—There are yet more genera to be taken from Saxifraga.

SAXIFRAGA.

lanceolata. 1. * S. (Spear-leav'd) foliis glabris ciliatis, rosarum 7-fido-palmatis, stolonum brevissimorum erectorum 5—3-fidis, caulinis lanceolatis; petalis rotundo-obovatis.

Obs. I had this plant from Mr. J. Donn as a Scotch species in May 1810. It is allied to adscendens. The petals are large and much rounded.

quinquedens. 2. * S. (Five-tooth'd) nuda, foliis stolonum virgatorum 5—3-fidis, remotis (longitudine internodiorum), laciniis subulatis aristatis æquantibus petiolos ciliatos.

Obs. Allied to S. adjugifolia, but thrice as small, with large orbicular petals. Probably a foreign species, as I found it in a small collection in bloom May 1810, and saw no British one with it.

tridens. 3. * S. (Trident) foliis ciliatis, rosarum 5-fidis, stolonum brevium erectorum trifidis confertis, laciniis linearibus acutis, petiolis internodiis brevioribus; petalis elliptico-oblongis distinctis.

Obs. A Scotch plant, communicated in bloom May 1811, by Messrs. Malcolm, Kensington; but unless my number sticks have deceived me, has also come up in my own garden from mixed seeds of other Saxifragæ. It is closely allied to S. trifida, but is smaller, with narrower and more hairy leaves, and narrower petals.

septifida. 4. * S. (Septifid) foliis stolonum brevium prostratorum 7—3-fidis confertis ciliatis, laciniis linearibus subcuspidatis, petiolis longitudine inter-

nodiorum; petalis cuneato-ovalibus vix imbricatis.

Obs. A Welch plant, communicated with the next but one, in bloom in May 1810, by Mr. J. Dixon, of Clapham, an assiduous and successful cultivator of Saxifragæ. Allied to S. quinquedens, but far larger, and with shorter stolones.

S. (Broad-cleft) foliis aristatis trifidis quinquefidisve: basi elongatis; superioribus linearibus indivisis, pedunculis longissimis nudis. —(*S. elongella*) *Smith in linn. soc. tr. v.* 10. *p.* 340; *et Eng. bot. t.* 2227, *excluso synonymo Donn. (ex Nobis in misc. nat.): quod toto cœlo discrepat.* *latifida.* 5.

Obs. A Scotch plant, communicated by Messrs. Malcolms. The divisions of its leaves are unusually broad.

S. (Hoary) foliis stolonum cuneatis semper tricuspidatis hirtis, caulinorum supremorum sæpius integris, petalis ellipticis non imbricatis. *canescens.* 6. *

Obs. Perhaps a var. of S. palmata. Sm. but longer shooted, slenderer, less villose, greener, and with narrower, and not imbricating petals. The root leaves are often palmate, but less so than in palmata. I believe it is a foreign plant.

S. (Hairy) foliis stolonum trifidis, petiolis longitudine internodiorum, petalis ovalibus non imbricatis. *hirsuta.* 7. *

Obs. I suppose this to be a Scotch plant, and perhaps a var. only of hybrida; but its shoots are longer, slenderer, and far more hairy, and its narrower petals do not imbricate, like

those of hybrida. The leaves are also much more remote.

Obs. *Saxifraga hirta of Eng. bot. t.* 2291, is not my hirta, nor the hirta of *Donn's hort. cantab. ed.* 5; all the new British species of that edition being taken from *Miscel. nat.*—*S. moschata of Eng. bot.* 2214, is no other than *S. pygmæa, Misc. nat.* which appears to have but few characters in common with S. moschata.

OXALIS. *Miscel. nat. p.* 185.

prostrata. 1. Obs. Oxalis corniculata of *Eng. bot.* is this plant, but it is quite a distinct species from O corniculata of *Fl dan.* 873, *&c.* cited by Withering as his O. corniculata; which last I received twenty-four years ago from a good Botanist as an English species, and which has still longer been cultivated in the British department of the Brompton (now Sloane-street) Botanic Garden, from originally English roots. This last plant scarcely differs specifically from O. stricta, but is smaller, has more prostrate stolone-like branches, and the disks of its leaves naked, not hairy as in stricta, and arises from self-sown seeds most abundantly, without varying.

AJAX.

Salisb. in hort. soc. tr. p. 243. *Narcissus Linn. &c.*

Telamon. 1. * A. (The great) scapo valde striato compressoque ore nectarii 6-fido expanso alte irregulariter crenato.

HABITAT .... H. ♃.

OBS. *Folia* latissima glaucissima, striatissima utrinque. *Scopus* sesquipedalis robustus anceps valde compressus, striis validioribus magisque elevatis quam in N. serrato. *Corolla* forte maxima, certe longissima omnium, at angusta ratione magnitudinis, tubo paulo angulato luteo: laciniis exactè semierectis tubo sesquilongioribus vel plus, tortis subellipticis pallide luteis, interioribus parum angustioribus: nectario perluteo longitudine laciniarum.

OBS. The common double Daffodil is a var. of this large species; and not of Narcissus major, as is usually supposed.

A. (Noble) scapo teretim-ancipiti alte striato, laciniis corollæ patentissimis tortis ellipticis luteis, nectario perluteo ore patulo profundissime serrato, brevioribus. *nobilis.* 2. *

HABITAT .... H. ♃.

OBS. Communicavit amicus Dom. Evans. Præcedenti minor, petalis magis expansis.

A. (Spurious) scapo lævi compresso ore nectarii prælutei altè 6-fido patulo, laciniis corollæ semierectis lanceolatis luteis. *spurius.* 3. *

HABITAT in Anglia apud Millhill, prope Londinum. H. ♃.

FLORET f. Ap.

OBS. *Folia* utrinque striata glauca. *Scapus* subpedalis anceps lævis magis compressus quam in præcedentibus. *Tubus* corollæ perluteus obsolete compressus laciniis multo brevior: *laciniæ* patulæ tortæ, exteriores lato-lanceolatæ, interiores paulo angustiores. *Nectarium* laciniis aliquantulum longius, ore pa-

tulo profunde 6-fido inæqualiter dentato subplicato; intus minutissime transversaliter rugosiusculum. *Antheræ* apice punctulo nigro.

Obs. A few plants of this were first pointed out to me by my friend R. A. Salisbury, Esq. growing wild amongst a variety of N. serratus (Misc. nat.) at Mill-Hill. They keep distinct in the Garden; and he joins me in thinking they may have originated from bees carrying the pollen of some garden species to the stigmata of the wild kind. Like N. serratus, they flower near a month later than the narrower-leaved and otherwise differing Kentish N. pseudo-narcissus.

QUELTIA. *Salisb. in hort. soc. tr. p.* 351.

Galanthifolia. 1. * Q. (Snowdrop-leav'd) laciniis corollæ lacteæ nutantis subtortis substellatis ovato-lanceolatis lateribus infernè deflexis, nectario poculiformi plicatissimo plus duplo longioribus.—*Narcissus totus pallidus oblongo calyce serotinus minor. Park. parad.* 73.

Habitat .... H. ♃.

Floret i. Mai.

Obs. *Folia* subeffusa angusta subtorta virescentia extus carinata, intus profundè concavo-canaliculata, Galanthum nivalem simulantia. *Cautis* anceps subangularis tortuosus 7—9-uncialis. *Spatha* uniflora (ut in cæteris). *Corolla* primo floris lactis colore, demum alba, nectario ore erosulo. *Stamina* viridia æqualia tubo duplo breviora. *Antheræ* magnæ perluteæ. *Stylus* viridis longitudine tubi.

HERMIONE. *Salisb. in hort. soc. trans.* 359.

H. (Cowslip-cup'd) subquadriflora, scapo obtusissime compresso lævissimo, laciniis corollæ perluteis late ellipticis, nectario subaurantio patulo alte sexlobato 3-4-plo longioribus, staminibus tribus exterioribus altitudine styli. —*Narcissus bifrons* β. *Bot. mag.* 1229. *Primulina.* 1. *

Obs. In May 1809 I named this species, from its Nectary *exactly* resembling the flower of a Cowslip. It is well figured in *Bot. mag.* as a var. only of *N. bifrons*, and confounded with my *compressus*, which Mr. Edwards painted from my Garden in 1808 for the Magazine. The Hermione *bifrons* of Salisbury mistaken for my N. *tereticaulis* in *Hort. soc. trans.* (a living specimen of which I saw with him, without leaves) is also different from the above, if I may judge from what I consider the same, just planted in my garden: having broader leaves and less regularly lobed cups than *H. primulina:* and if so, here are four or five species confused under one or two; and two eminent describers of bulbous plants misunderstanding *N. compressus* and *tereticaulis.*

As to any of these plants changing one into the other, according to *Bot. magaz.* no *grower* of plants can one moment believe.

H. (Waxen-cup'd) pauciflora, nectario præamplo subincrassato truncato cerino, petalis albis duplo breviore. *cerina.* 2. *

Habitat .... H. ♃.

Floret f. Ap. in tepidario, in horto Dom. Vere, f. Ap. 1807, sed non sub dio postquam.

Obs. *Folia* 4, lorata obtusa glaucescentia latissima absque carina. *Caulis* teretiusculus glaucescens foliis vix brevior. *Pedunculi* 4 inæquales triquetri striatuli. *Germen* 3-quetrum. *Corolla* tubo itidem plus minus 3-quetro s. teretiusculo, laciniis albis ovatis tubo fere dimidio brevioribus, basin versus valde imbricatis patentibus s. aliquantillum reflexis. *Nectarium* præamplum ratione floris, crateriforme subcarnosum luteo-cerinum semilongitudine laciniarum, ore integerrimo truncato. *Stamina* 3, cum *stylo* extra tubum porrecta, 3 alia breviora inclusa.

fistulosa. 3. * H. (Hollow-stalk'd) corollæ laciniis albis nectario recto inflato subintegro luteo fere duplo longioribus.

Habitat.... H. ♃.

Floret m. Ap.

Obs. *Folia* 10 linearia latitudine, lævia subcarinata. *Scapus* fistulosus teretiusculus alte striatus, 9-florus et ultra. *Pedunculi* inæquales 3-quetri s. semiteretes altissimè striati. *Germen* obsoletè 3-angulare oblongum lucidum. *Corollæ* tubus semiteretiusculus, laciniæ subreflexo-incurvæ ovatæ æquales valde imbricatæ et plus minus mucronatæ tubo breviores. *Filamenta* gracilia, 3 tubum superantia, 3 æquantia. *Antheræ* perluteæ. *Stigma* trifidum laciniis [illegible]alis.

grandiflora. 4. * H. (Great-flower'd) sub-8-flora, petalis amplissimis albis, nectario patulo parum plicato crenulato luteo.—*Bazelman major, Hortulanorum.*

Obs. This, our largest flowered species, is the H. crenularis of Salisb. in Hort. soc. trans. under the idea of its being my N. crenulatus, which

is the Bazelman *minor* of the Gardens, a distinct, but kindred plant.

NARCISSUS.

N. (Drooping-leav'd) foliis semuncialibus glaucis superne debiliter recurvo-dependentibus; petalis imbricatis lateribus inflexis; nectario patellari perplicato, margine crenulato coccineo; stigmate longitudine staminum interiorum. *recurvus.* *

Habitat .... H. ♃.

Obs. I find no account of this plant in authors, not even in my acute friend Salisbury's arrangement of this tribe under new genera (all which he has long known were consonant to my ideas) in the sixth part of *Hort. soc. trans.* From his *radiiflorus* (exclusive of its flowers) this species differs in having leaves twice as broad, more glaucous, and with less conspicuous keels; and may be distinguished even at a distance by their points hanging down. And from *N. patellaris* (Salisb. prod.) I would distinguish it by giving patellaris the following specific character. N. foliis 4-linearibus glaucis subincurvantibus, petalis imbricatis lateribus deflexis; nectario patellari luteo, minutissime plicatulo, margine subscarioso circulo albo gracili externe coccineo crenulato; stigmate longitudine staminum interiorum.

Obs. Patellaris flowers rather the earliest, and is a smaller plant. The true N. *poeticus* (Salisb. hort. trans. l. c.) differs abundantly from both not only in its foliage, corolla, and earlier flowering, but in the far more flattened and differing Nectary. They are all most beautiful and fragrant plants; quite hardy, and of easy culture. The common double

Narcissus called "Primrose Peerless" is a variety of *patellaris*, and is the identical poeticus of Dr. Smith, in English Botany; as roots from the place his came from soon produced flowers more or less double; clearly showing their garden origin. His N. biflorus (which is absolutely a mule, for no one can find even rudiments of its seeds) is also an outcast of gardens.

CORBULARIA. *Salisb. in hort. soc. tr.* 351.

albicans. 1. * C. (Whiteish) sulphurascens, s. albicans: nectario turgido integerrimo longitudine laciniarum: stylo excluso: foliis obtusiusculis.—*Pseudo-Narcissus Juncifolius albus. Park. parad.* 106.

Obs. This is the fifth species of this genus I am acquainted with; it differs from C. Bulbocodium, as above, and in having shorter coralline laciniæ. I imported it from Holland in 1789 by the name of "*Trompet Marin,*" (along with the next article) and lost it the following year. This description is from the dry specimen mentioned in Hort. soc. trans. 351.

ASPHODELUS. *Gen. pl.* 570.

asiaticus. 1. A. (Asiatic) foliis glaucis sesquipedalibus latitudine subunciali, corollæ laciniis ovali-oblongis basi imbricatis, bracteis pedunculo curto brevioribus, scapis simplicibus s. ramosis.—*Asphodelus asiaticus hortorum Batavorum.*

Obs. Differs from A. ramosus in its leaves dying more completely down in winter; appearing later in spring, being glaucous (not green), and three times shorter and more upright, and far broader; in its scape being far shorter and often simple; in its far shorter peduncles, and

shorter but far broader segments of the corolla. The stamina and style are also far shorter, and the antheræ yellow, not rufescent. From A. luteus it differs *generically*, not having an *irregular* corolla and *incurving* filaments, &c.

Obs. Since printing the above, Mr. Cuff, of Teddington, has obligingly sent me Stapelia pedunculata (of page 23) in bloom. It forms a new genus, as follows.

CARUNCULARIA.

Ligulæ 5, breves patulæ emarginatæ. *Stamina* 2-partita recurvantia compressa deorsum attenuata, apicibus globosis granulatim carunculatis, granulis diversiformibus.

C. (Peduncled) pedunculis longissimis, laciniis corollinis margine revolutis, angulis fimbriatis.—Supra p. 23. *pedunculata.* 1.

Obs. *Pedunculi* glomerati teretes 3-4-unciales virides erecti, at ex inferiore parte ramuli. *Calyx* 5-phyllus acutè stellaris. *Corolla* 5-petaloidea laciniis carnoso-loreis revolutis subasperis, sulcis 3 longitudinalibus obsoletis, basi supra marginem fasciculo pilorum tremulorum spatulatorum rufo-vinaceorum, extus viridibus punctis rarioribus rubris basin versus, odore ovorum putridorum. In ipso fundo corollæ stella 5-gona rufo-aterrima e granulis lente subspatulæformibus genitalia ambientibus. *Ligulæ* atro-rufæ breves cavo-canaliculatæ emarginatæ patentes. *Stamina* inæqualiter 2-partita (Stapeliarum) atro-rufa laciniis crassis compressis superne recurvantibus capitatim granulato-carunculatis subglobosis. Cætera non examinavi.

Additional Note on Mesembryanthemum albidum, &c.

This fine species expands its large flowers, three or four inches wide, late in the afternoon, and does not close them till eight or nine o'clock the next morning. They therefore admit of being used ornamentally with lacerum, &c.

patulum. 1. * M. (Spreading) decumbens, foliis 6—12-linearibus semi-erectis glaucescentibus punctulis pellucidis asperiusculis.—M. compresso proximum, at minus rigidum vel erectum, foliis brevioribus crassioribus glaucioribus magis expansis.

Flores non vidi.—Nov. sp.

Communicated by Mr. J. Ross, Nurseryman, Stoke Newington, who raised it from Cape seeds in 1811.

curtum. 2. * M. (Short-sheath'd) erectum, foliis subconfertis patentibus viridibus vaginis curtis inconspicuisve, multoties longioribus.—M. vaginato proximum, foliis crassioribus non subulatis, vaginis brevissimis, s. folio tectis.

Flores non vidi.—Nov. sp.

Communicated by my friend Mr. C. Law, of Stoke Newington, an assiduous collector of Mesembryanthema.

P. S. In this place my grateful thanks are given to all my friends, but more especially to Arthur Tyton, Esq. of Wimbledon Common, an extensive cultivator of plants, and R. A. Salisbury, Esq. whose botanic knowledge is beyond my praise.—But for their exertions in procuring subscriptions, this little work would never have appeared.

Richard Taylor and Co. Printers, Shoe-Lane, London.

SAXIFRAGËARUM ENUMERATIO.

AUTORE

A. H. HAWORTH, L.S. Soc. etc.

"The more I observe, the more I find the necessity of observation: and the less I rely upon what I have observed."—Saussure.

ACCEDUNT

REVISIONES PLANTARUM SUCCULENTARUM.

LONDINI:

Veneunt apud WOOD, 428, Strand.

MDCCCXXI.

TO

THE REV. WILLIAM THOMAS BREE, A.M.

A SUCCESSFUL CULTIVATOR

AND MOST ACCURATE OBSERVER

OF SAXIFRAGEAN PLANTS,

THE FOLLOWING

DISSERTATION ON THE NATURAL ORDER

SAXIFRAGËÆ

IS MOST RESPECTFULLY INSCRIBED,

AS A TRIFLING TESTIMONY OF GRATITUDE AND ESTEEM,

BY

HIS OBLIGED FRIEND, AND HUMBLE SERVANT,

THE AUTHOR.

Typis R. et A. Taylor,
Shoe-Lane.

PREFACE.

SINCE the publication of the *Dissertation* on such species of the Linnæan genus *Saxifraga* in the year 1803, as the author up to that period had seen alive, or found cultivated in the gardens of England; our knowledge concerning that intricate genus and the genera allied to it, has been much augmented, both by the discovery of new species, and by further information concerning those already recorded.

In the *Dissertation* of 1803, a promise was held out, that it would probably be extended at some future and more favourable period to the remaining *Saxifragæ*, although they might not be cultivated in the gardens of England. That time has at length arrived; and that promise is in the following pages more than fulfilled; the present essay extending itself quite through Saxifraga, to the remaining genera of the Saxifragëan Order, with the exception only of the frutescent and arborescent genera of Hydrangea, Weinmannia, and Cunonia; temporarily appended to it by Jussieu, but

which in all probability are the incipient rudiments of yet another Order, between the present and that of *Caprifolia*.

Nor is the old genus *Saxifraga*, here, merely simply enumerated; but extensively revised; broken down; and remodelled; with a view to lessen its intricacy; (which every Botanist complains of,) by decomposing its incongruous combinations, and rebuilding from the decomposition, and from the examination of many newly discovered species, a more appropriate, commodious, and natural distribution of the whole: thus disposing the old genus into such new generical groups as palpably appear to consist each of plants constructed as it were on one model; and so greatly resembling each other in habit, size, and appearance, that a Geologist might say, they are evidently "all of the same *formation*."

Such the author ventures to believe all *true* Genera really to be; and their species and varieties merely discrepancies of a minor appearance. And such groups usually themselves point out a *common* name; that is, a name applying in common to them all; which again reciprocally points out the group. Whence this mode of collocating plants, should seem to be a natural one at least.

Neither does the famous canon of Linnæus ("Genus dabit characterem, nec character genus,") at all interfere with the plan proposed, although in the present instance, we should rather say, "Genus naturale, naturalitèr dabit nomen: nomen quoque

genus;" because the canon of Linnæus alludes to the fructification alone, while ours more especially looks to the habit.—Happily, too, such natural groups as are here understood, are also usually accompanied by corresponding agreements in the parts which compose their fructifications, and from which Botanists are enabled to construct their technical generical characters: although this (as is best known only to those who have longest laboured at it) is a much less easy business than is commonly imagined; and liable (as the canon of Linnæus asserts) to a multitude of unexpected and interrupting aberrations. These it is the province of the Botanist to overcome. And where the knot is too intricate to be at all unravelled—he who *cuts* it in the most ingenious manner, still renders a valuable service to the science.

In the *Dissertation* of 1803, *Saxifraga sarmentosa* was the only species mentioned as anomalous and isolated; or as likely to form a new genus. And in 1809, it became actually elevated into one, under the name of *Ligularia*, by Duval, in his catalogue of Succulent Plants in the Gardens of Alençon. Since that time, a second species has been discovered and introduced into our gardens, which is here described by the name of *Ligularia minor*, which the writer hears is figured in the Botanica Cabinet, but he has not seen it. Previously to the publication of the above-mentioned Catalogue, the author of this Essay had in his MS. named this genus *Sarmentea*, from its strawberry-

like runners. That name of course he now relinquishes; preserving its signification, however, for the purpose of distinguishing a subdivision of Genera; because these very remarkable plants *still* remain anomalous; and in that manner, still require an isolated post.

After this, in the year 1812, in an appendix to the author's *Synopsis Plantarum Succulentarum*, three more genera were removed from *Saxifraga*, and some new species enumerated. And it was moreover there announced, that more species would eventually recede in the shape of new genera, from the old Genus; the result of which separation will gradually develop itself in the following pages. The new generic names there given, have been carefully constructed from the most universal features; and always in the feminine gender of *Saxifraga;* for the especial purpose of preventing any orthographical alteration in the specific names of the plants, on their elevation to genera; except only in the instances of *Miscopetalum* and *Hirculus;* the former of which was printed before the idea occurred, and the latter remaining (according to the laws of Linnæus) as an ancient *generic* name.

It will in all probability be the opinion of some Botanists, that too many new genera are here made out of the old Genus Saxifraga, and from discrepancies too often resulting from *habit*, and too seldom from *character;* and consequently sometimes unnecessarily introduced. The author

begs leave to refer such Botanists to what he has said in another place: viz. "That it is not a Botanist who actually *makes* genera. He merely attempts, by his art, to *discriminate* those which the mighty hands of his own Maker have already made; and not only made, but sealed; each, as it were, with some peculiar mark; which we distinguish by the name of *habit;* and by which we may know them, without the aid of the characters of the fructification." *Suppl. pl. succ. p.* 40.

But if we take character alone, regardless of habit, as the clue to guide us in the construction of Genera, or even in the difficult determination of Species, we shall frequently be induced to form erroneous conclusions: while on the other hand, the *natural habits*, if duly appreciated, will serve like beacons, and the lights of a Lighthouse, to direct us to the truth.

Yet it may still be said, so great a multiplication of genera burdens the memory; that it is impossible to recollect them: and that new sections might answer as well. It is answered, New sections must have new names, and that those will equally add to the burden of the mind. It may be replied, It is not requisite to remember so minutely, in *any* tribe whatever. But those who so think, will seldom learn to discriminate either closely, or extensively; for in some tribes it is requisite: and if they suppose but half the genera at present on record, can be distinctly retained by human memory; they are as much mistaken as one who

should say, he knew off hand, and thoroughly, all the words of the English dictionary. Happily, it is not *necessary* to recollect extemporaneously either all the Genera, or *half* the Dictionary; so long as the former are systematically distributed, and while the latter submits to the dominion of the alphabet.

With respect to the collocation of the Genera and Species in the present Essay, the author does not flatter himself that it is the best that can be offered for the elucidation of the *Saxifragëan* Order; and it is with diffidence he ventures to propose it as an improvement only, of the old one. Perhaps, indeed, it is scarcely possible that any descriptive arrangement on paper, that is at the same time necessarily a continuous one, that is, in a straight line, can ever be entirely unexceptionable. Because every good Botanist may perceive that a perfectly natural distribution of the genera or the species, should be made, not continuously, but as it were circuitously, somewhat resembling the face of a map; such being the way of nature invariably, in arranging her manifold productions. For as well might Geographers endeavour to link kingdoms and counties longitudinally, as a Botanist to place genera and species *naturally*, in the continuous way of a straight line. For the Kingdoms and the counties in the one case, and the Genera and species in the other, mutually approximate, not merely at *one* point, but almost invariably at many.

Thus would *Spatularia stellaris* (below) be a *Robertsonia*, but for its differing filaments—a *Miscopetalum*, but for its reflected calyx, or a *Saxifraga*, but for both these characters. Yet the causes which would give gracility to the base of its filaments, as in *Robertsonia*, would probably also alter its habit to the petiolated leaves &c. of that genus,—those which would turn up its calyx, might change its cuneated leaves, and clothe its naked scape with the rounded ones of *Miscopetalum*;—or the causes which would produce all those characters, or wipe them all away, might leave it still a true *Saxifraga*. In a word, whatever causes could alter any one of these pristine generic conformations, would likewise, in all probability, very far disturb, or even remodel the appearances of others; so that, however trivial or inefficient the apparent characters of *Spatularia*, or those of any other Genus, may seem as generical ones; they are, nevertheless, *botanically*, very important.

Hence it should seem, that nothing short of a botanical map, or some distribution resembling a genealogical table, can show fairly to any thing but the eye of the *mind*, the real but gradual approximations of genera and species towards each other. And such a scheme, showing individually the essential characters, of at least the Genera, will probably, ere many ages pass, be appended to the head of many a natural Order of Plants; while the letter press details the same longitudinally, and with other characters more at large.

And closely analogous to this doctrine of the conformity of plants of the same natural genus to each other, in this great age of improvement in every way, is the science which displays the actual geographical stations of the genera; or in other words, as we should rather say, the primæval dispersion of the vegetable kingdom over the face of the earth. And this is both a novel and important study. For the primitive distributions have been by no means vague or indeterminate; but almost always geographically regular; although various natural and even artificial operations have, at various epochs, very far disturbed those pristine regulations. Such more especially, as rivers, seas, and floods, (and hence the wide spread of aquatic plants), and the dreadful concussions of geological catastrophes: as well as the various and extensive emigrations of the human race—of quadrupeds and birds: each more or less frequently operating in the wide spread of vegetable seeds: which thereby, wherever the climate is congenial, become occasionally naturalized in a foreign soil. Hence can the geographic botanist frequently trace the sites of ancient and otherwise obliterated towns and cottages, by the extraneous or exotic weeds which remain there very long after the desolation of the ruins they inhabit. And through such means, the time perhaps may arrive, when even some of the most hidden and early migrations of the human race, and the consequent formation of nations, may be faintly found (through the vege-

tables they have left), or gradually developed by the geographic botanist. Thus may Botany help to corroborate the sagacity of the antiquarian and the historian, and the botanist receive reciprocal assistance: thereby proving how important the sciences may become to each other, through the medium of deductions at first imperceptible. But we must cease digressing.

This Essay would not so soon have appeared, had it not been for the solicitations, and through the assistance, of the author's valuable friend and coadjutor in collecting, cultivating, and communicating this Order of plants—the Rev. W. T. Bree, of Allesley near Coventry. For the furtherance of this purpose; he has personally examined many of the English, Welch, and Scotch mountains, with unusual success: and those of Ireland, also, have yielded to his assiduity an abundant harvest of interesting matter. Nor has his zeal stopped even here; for it has induced him to purchase costly publications, without the aid of which the present Essay could hardly have been completed. To his liberal coadjutor, therefore, the author has gratefully requested permission to dedicate the whole.

The observations of Mr. Bree concerning the nature of those multifid-leaved *Saxifrages* allied to *Sax. Hypnoides*; (and which thence we call Hypnoidëan), and more so still respecting the genus *Robertsonia*; the former in the mountains of Wales, Cumberland and Scotland, the latter in

those of Ireland only, (where they seem quite at home,) have been the means of affording us considerable information; and that, too, of a kind not to be satisfactorily acquired, but by an examination of these very variable plants in their spontaneous places of growth.

Thus it was among the wild mountains of Kerry, especially about the lofty "Reecks," in the romantic "gap of Dunloe," and in the neighbourhood of the far-famed and beautiful banks of Killarney, that he gathered every possible shade of intermediate variety, between *Saxifraga Geum* of English Botany, and *Saxifraga hirsuta* of the same work, (but not exactly the *hirsuta* of Linn., which he thinks is not a distinct species;) including moreover pretty near similitudes of the continental *Saxifraga punctata* and *Sax. umbrosa* of Linnæus; yet assuredly not, at least, the latter, nor any thing than can be mistaken for it: nor even the exactly continental *punctata*. In short, he scarcely found any thing constant amongst them, except their constant tendency to endless variation: and all this, apparently, through the hybridizing processes of cross impregnation. Hence he finds the greatest difficulty in determining which are the original species, from whence all this profusion of mongrels have gradually arisen; and concludes they are but two. Neither is he satisfied that *Robertsonia umbrosa*, which he gathered in Hessleton Gill, Yorkshire, (the place mentioned in English Botany,) is more than of garden origin;

wherefore that long doubted native of Britain must again remain at least a doubtful British species. But here, the author, yet with diffidence, inclines to disagree with his coadjutor; simply because the Hessleton Gill plant is not by any means the same as the common foreign *R. umbrosa* of our gardens, but a very strong variety of it, with much shorter petioles and smaller panicles; which do not appear to alter under the tests of cultivation. This variety, Mr. B. supposes, may be the same as the *Robertsonia umbrosa*, which is found on the banks of the Clyde, although in all probability not of spontaneous origin. And a plant Mr. B. received from the Edinburgh Botanic Garden (and which he conjectures is the Clyde one) under the name of *Saxifraga umbrosa*, "is so much like the Hessleton Gill one, that it might well pass for it." Such, in a letter, are his words; and he also says that he saw *R. umbrosa* "*almost naturalized*" in a romantic spot near a gentleman's seat in the county of Wicklow.

With respect to the whole tribe of *Hypnoidëan Saxifrages*, Mr. Bree is inclined to think that they are really as sportive on the Welch and Scotch mountains, as that of *Robertsonia* on the mountains of Ireland. And this opinion he takes up not rashly, but from having actually observed similar variations, and innumerable gradations in hue, and size; and even, as he imagines, in the laciniation of their leaves. Wherefore, it has been deemed proper in the present Essay to reduce the number of supposed *Hypnoidëan* species, as well as those

of the variable genus *Robertsonia;* retaining nevertheless in both tribes, some of the leading variations as named varieties, or subspecies.

It may here be imagined by some, that the author's opinions concerning the specific distinctions of plants, are as peculiar as those above advanced respecting the genera. For his continued experience seems at length to confirm him in the doctrine which he has ever in private proposed; but which now he ventures thus publicly to announce, viz. That there are, on the one hand, many native plants which afford *no* specific characters, in the Linnæan sense of those words, and which still are species: and that, on the other hand, there are some, which, although they present abundant specific characters of the Linnæan kind, are nevertheless varieties only.

Hence it is conceived that the *Hypnoidëan Saxifragæ* of Snowdon, &c. are but seldom, if ever, exactly the same as those of Scotland: or that either precisely resemble those which inhabit the mountains of Kerry. And the keen eye of a botanist, by their habit alone, is able to distinguish the one from the other, however trifling their actual discrepancies may be.

The *Hypnoidëan* tribes are perhaps more difficult to understand correctly than any other; for although the eye of a botanist may be able to discriminate amongst them, the tongue often, and even the pen, is foiled in attempting to describe what is actually perceived. In this intricate department therefore, above all others, the author

solicits the reader's indulgence, having still endeavoured to do his best. The strictest attention is necessary both to the rosaceous and stoloniferous periods of growth in these plants, as laid down at large in the *Dissertation* of 1803; nor can any thing decisive be determined without it, although the period of their earliest flowering seems to afford the best opportunity for constructing characteristic names; for perhaps at no other season are so many and such strong characters simultaneously developed. Then are the old rosaceous leaves of autumn and winter, still surrounding the base of the scape; and the nascent stolones of spring, beginning to shoot forth; and perhaps also, every other character is then partly perceptible; except, indeed, the elongation of the styles and stigmas, and capsules which are yet unformed. But fortunately the three last points are more of generical than specific importance. And were we to wait till they were formed, the rosaceous leaves would partly disappear, and the ripening stolones would thicken at their ends, commencing the preparation for the future rose-shaped tufts: thus blending together the distinctive features of two remarkable seasons of growth, so as to defy the discrimination of the most discerning eye, and baffle the decision of the most consummate judge.

Here, perhaps, towards the close of this preface, a few words respecting the cultivation of *Saxifragëæ* may neither be unacceptable, nor inappropriate; especially as they are offered as the result of long experience and extensive cultivation.

All the larger species thrive very well in almost any situation, yet seem to prefer moisture, coolness, and moderate shade; and to look neat, require transplanting and dividing at least once in every two or three years. The middle-sized species will also thrive in shady borders (but not overshadowed by trees) of very light vegetable earth, especially such boggy earth as Rhododendrons and Heaths delight in; in such situations they require dividing and transplanting at least once in every year.

The remaining small and minute species will scarcely thrive out of small pots of bog earth and loam, and are best sheltered in a frame during the winter, from excess of wet and frost; but at all other times they require to be constantly exposed to the air, and should be carefully divided and transplanted every spring and autumn into fresh earth. These pots in summer should have the morning sun only for a few hours, in autumn rather more, and in the middle of winter an aspect to the south; but still with the lights of the frame constantly down in all but very wet or hard frosty weather; and even then they may be exposed, if the sun shines strongly: for nothing is more prejudicial than forcing their natural forwardness prematurely into blossom.

The whole order, but more especially the smaller species, are excellent furniture for rock-work; and if placed judiciously with regard to aspect, will succeed very well, and prove highly ornamental.

It is scarcely necessary to add, that due atten-

tion to watering is requisite, especially for those in small pots; and that worms, slugs and snails are remarkably partial to all these plants, and often destroy them, in spite of the most unabating assiduity of the gardener to prevent such depredations. The Genus *Ligularia*, being more tender than the others, is hardly secure, even in mild winters, without the protection of the greenhouse, although near London it sometimes survives, and even flourishes out of doors on shaded rock-work. The earth in the pots, and about the small species on rock-work, &c. should be stirred on the surface occasionally, and a little fresh added when requisite; and the whole of course kept clear from weeds, or the overpowering luxuriance of other plants. The Genus *Antiphylla*, although its native rocks are moist, in a cultivated state delights more in sun and drought than many of the others, and indeed will not blossom in our open ground at all, or even in pots without due attention to its proper wants. But if planted in a mixture of half bog earth and loam, placed in the full sun, and watered sparingly even in summer, and wintered in a frame; it will blossom annually, very early and brilliantly. From its small size, lovely flowers, and early appearance, it is a welcome ornament to the parlour or study, and is brought abundantly to Covent Garden Market every March, or even at the end of February, and eagerly purchased (as other writers have observed) for those purposes.

Most of the species are propagated very rapidly by parting their roots in spring, summer, or au-

tumn; and also plentifully, even by self-sown seed;—but the seed when produced in the neighbourhood of kindred species, is ever liable to be adulterated through the means of busy insects, or the passing gales; and is therefore on no account to be preferred where an increase can be had by parting the roots. Indeed, from the numerous mongrels already in our gardens, this tribe, like some few others, threatens very soon to bid defiance even to the eyes of a botanist, to discriminate amongst its contaminated seedlings, which are constantly arising, however distinct the parent plants may be, and how widely soever separated in a state of nature by intervening countries or continents, or even half the globe.

The seeds when sown, require only shade and moisture, and the common protection from weeds, frost, worms, insects, slugs, and snails, &c.; and will flower the second year after sowing, and sometimes sooner. But as they usually vegetate very freely, thinning and transplanting are frequently necessary.

Cottingham near Hull,
Jan. 7, 1817.

P.S. An *, as heretofore, denotes such plants as are presumed to have been first specifically described by the author; or by him first shown to be erroneously named by other authors; or, at the least, first admitted by the present writer as distinct species, since the days of Linnæus.

SAXIFRAGEÄRUM ENUMERATIO.

PLANTARUM DIVISIO,

DICOTYLEDONES.

CLASSIS XIV. POLYPETALÆ.

STAMINA PERIGYNA.

SAXIFRAGÆ. DIV. I. II. *JUSS.*

ORDINIS CHARACTERES (subinde) ex *Juss.*

Calyx superus, semisuperus, inferusve, germen includens, 4-5-fidus.

Corolla parva, 4-5-petala, rarissimè 4-5-fida, nullave; petalis summo calyci insertis, ejusdemque laciniis alternis.

Stamina totidem, aut sæpius dupla, rariusve 8-9, ibidem inserta.

Styli et *Stigmata* 2-5, primò exigui, demum sæpius grandes, persistentes.

Fructus capsularis polyspermus, apice birostris bivalvis, valvis introflexione dissepimentum con-

stituentibus; rarius omnino bivalvis, vel bilocularis; rarissimè subbaccatus 4-5-locularis; loculis monospermis.

Semina dicotyledonea minuta, rotunda oblongave, lente glabra, tuberculata, sulcatave. *Corculum* incurvum typo farinaceo, aut subcarnoso, circumpositum.

Herbæ sæpius ramis sempervirentibus, humiles sive exiguæ, radicibus (Tridactylites excepta) perennibus fibrosis, rarissime annuis vel granulosis, rectimve herbaceis. *Folia* fere semper alterna, petiolata indivisa lobata palmatifida, vel rarius ternata biternatave, crassiuscula vel carnosula subimbricantia, vel in rosulas densè sæpe disposita. *Scapi* sæpe paniculati teretes solidi, rariusve fistulosi, ramis foliolo bracteâve suffultis. *Habitant* præcipue in montibus Europæis; undecim in insula arctica Melville: rarius locis humilioribus, et fere semper in humidis: perpaucæ in Siberia et Americ. Septent.: unaque in Peru, duæ in Sina Japoniave: alteraque in montibus Nepaulensibus.

GENERUM DISTRIBUTIO, CHARACTERESQUE EORUM ESSENTIALES.

I. DECANDRÆ.

1. *UNIVALVES.*

* RECTO-CALYCATÆ, calycibus rectis.

† ACAULES ramis propriis nullis, foliis sempervirentibus, scapis sæpe aphyllis.

1. MEGASEA. Stamina calyci semicoadunata.
2. DERMASEA. Stamina libera, petala distantia.
3. CHONDROSEA. Germen hemisphæricum annulo tumenti.

†† FOLIOSÆ, (rarius annuæ rectimve herbaceæ,) ramis plerumque sempervirentibus; scapis caulibusve foliosis.

4. MISCOPETALUM. Petala pedunculata.
5. LOBARIA. Germen superum. Styli breves recti, stigmatibus inconspicuis.
6. TRIDACTYLITES. Germen inferum urniforme. Styli breves patuli, stigmatibus inconspicuis.
7. SAXIFRAGA. Germen semiinferum. Styli longi, stigmatibus magnis spatulæformibus.

8. MUSCARIA. Germen inferum. Petala sessilia angusta.

9. LEPTASEA. Germen superum. Petala sessilia angusta remota.

10. HIRCULUS. Petalorum basi rima nectarifera.

11. CILIARIA. Germen superum. Petala orbiculato-ovata unguiculata.

12. ANTIPHYLLA. Germen semiinferum. Styli subacuminati.

** REFLEXO-CALYCATÆ, laciniis calycinis reflexis, scapis fere aphyllis. Germen superum.

† SESSILIFLORÆ, corollis regularibus.

13. MICRANTHES. Petala lorata distantia.

†† DECURRENTES, foliis alatim decurrenter petiolatis; petalis 2 inferioribus cæteris plerumque longioribus.

14. AULAXIS. Capsulæ fere in duas divisæ. Corollæ irregulares.

15. SPATULARIA. Capsularum rostra recta. Corollæ præirregulares. Semina oblonga medio parum crassiora. Inflorescentia laxè et tenuè paniculata. Stamina infernè parum crassiora. Sive: Capsularum rostra recurva. Corollæ regulares. Semina subovata gibba. Inflorescentia minimè corymbosa.

††† SARMENTOSÆ, corollis maximè irregularibus, sarmentis numerosis tenuissimè filiformibus carnosis.

16. LIGULARIA. Germinis glandula cerina dentata.

†††† PUNCTIFLORÆ, corollis regularibus foliis altè petiolatis.

17. ROBERTSONIA. Stamina basi gracillima, supra valdè incrassata.

2. *BIVALVES*, capsulis unilocularibus bivalvibus.

18. MITELLA. Petala pinnatifida.

19. TIARELLA. Petala integra.

II. OCTANDRÆ.

20. CHRYSOSPLENIUM. Corolla nulla.
21. ADOXA. Corolla 4-5-fida.

III. PENTANDRÆ.

22. HEUCHERA. Capsulæ biloculares.

SPECIERUM ENUMERATIO, EARUMQUE CHARACTERES VARIÆ.

I. DECANDRÆ.

1. *UNIVALVES.*

* RECTO-CALYCATÆ, calycibus rectis.

† Acaules, ramis propriis nullis; foliis sempervirentibus, scapis sæpe aphyllis.

1. MEGASEA. (Saxifraga *Linn.* &c.)

Calyx campanulato-5-lobatus infernè melliferus. *Petala* 5, persistentia. *Stamina* calyci coadunata, usque ejus lobos. *Germen* superum. *Capsulæ* 2-rostratæ basi solum coalitæ.

Herbæ perennes, maximæ in Saxifrageärum ordine, senectæ caudiculatæ. *Folia* petiolata indivisa magna erecto-effusa sempervirentia. *Scapi* 2-3-pedales robusti. *Flores* inter majores, præcociores, purpurei, paniculatim conglomerati, penduli.

Obs. Germen semiinferum hoc quasi intendit Natura, at omisit colligere calycis partem inferiorem, ut in affinibus; inde magnum anomalum vidi, viz. Calycem 5-lobatum staminibus eo manifestè coadunatis: in cæteris invisibiliter.

crassifolia. 1. M. foliis obovatis retusis.
Saxifraga crassifolia. Linn. sp. pl. 573.—*Willd. sp. pl.* 2. 644.—*S. crassifolia* α. *Ait. hort.*

kew. ed. 1. *v.* 2. 79.—*ed.* 2. 3. 67.—*Curtis magaz.* 196.—*Pers. synops.* 1. 488.—*Gmel. fl. sib.* 4. 166. *t.* 66.
HABITAT in Siberia. ♃.
INTROD. in hortis 1765.
FLORET Mar.—Apr.
OBS. *Folia* retusa obsoletè serrata, supra plus minus rubentia. *Scapi* 1-3-pedales. *Petala* subinde sex.

M. foliis cordatis orbiculatis crenatis; floribus glomeratis. *cordifolia.* 2. *
Saxifraga cordifolia, nobis in Misc. nat. p. 156. —*Ait. hort. kew. ed.* 2. 3. 67.—*S. cordifolia β, ed. prioris.*
HABITAT in Siberia.
INTROD. in hortis ante 1779.
FLORET Mar.—Mai. ♃.
OBS. Simillima præcedenti, sed abunde distincta: differt foliis cordatis orbiculatis viridioribus, magisque serrato-crenatis, paniculâ magis glomerata et patenti.

M. foliis suborbiculato-cordatis planis minime crenulatis. *media.* 3. *
HABITAT in Siberia? ♃.
OBS. Vigebat in regio horto Kewense, A. D. 1819, quasi intermedia inter duas præcedentes, at folia planiora integriora. *Flores* speciosiores, saturatiores, minus glomerati. *Floret* cum illis.

M.? foliis subcordato-cuneatove-orbiculatis strigoso-ciliatis. *ciliata.* 4. *
HABITAT in montibus Nepaulensibus. Folii partem, floresque 10 siccatos, communicavit Amicus R. A. Salisbury, F. R. S. &c., nomine Bergeniæ

species *Mœnch.*, cum proposito nomine specifico ciliaris, A. D. 1819. Et vidi viventem (sine flore) in regio horto Kewense, in eodem anno. Non rectè examinavi.

2. DERMASEA. (Saxifraga *Linn.* *&c.*)

Calycis laciniæ horizontales latè parabolicæ planæ. *Petala* persistentia distantia, plus minus rotundato-ovalia, exunguiculata alba immunia. *Stamina* brevia filiformia. *Germen* semisuperum grossum semifissum. *Styli* brevissimi, *stigmatibus* mediocribus.

Herbæ perennes. *Folia* breviter petiolata plana humi expansa, duriora s. subcoriacea, plus minus, præcipue ad margines, villosula, pilis (lente) subglanduliferis. *Scapi* solidi, pilis glanduliferis, *bracteis*que majusculis foliiformibus apud flores capitatos fere sessiles, s. capitato-paniculatos; vel ad ramos panicularum.

pilosa. D. foliis cuneato-obovatis subdentatis petiolo bre-
1. vioribus, caule paniculato.

* *Saxifraga pilosa. Nobis in Misc. nat.* 157.—*Sax. virginiensis. Pursh. fl. americ. sept.* 310.—*Bot. magaz. t.* 1664.

Habitat in America Septentrionali: quoque in Scotiæ montibus, teste Dom. Geo. Donn, cujus filius mecum communicavit.

Floret Apr. ♃.

Introd. in hortis circa 1800.

Facies sequentis, at paulo major, minute omnino pilosa (fructificatione excepta). *Radix* fibrosa. *Folia* obovata obtusissima dentata, basi sæpe subcuneata, utrinque pilis brevibus erectis vestita, *petiolis* folio longioribus semiteretiusculis. *Caules* plurimi erecti spithamei teretes subnudi

paniculati, ramulis alternis. *Bracteæ* lineari-subulatæ, minutim ciliatæ. *Pedunculi* solitarii breves, pilis horizontalibus minutè vestiti. *Calyx* campanulatus quinquefidus, laciniis ovatis glabris æqualibus. *Corolla* quinquepetala, *petalis* ovato-oblongis sive ellipticis albis immaculatis, a medio subrecurvatis. *Filamenta* decem brevia albida, *antheris* luteis. *Germen* superum viride. *Styli* duo virescentes. *Misc. nat. l. c.*

β. (*verna*:) foliis cuneato-ovalibus argutè serratis petiolo brevioribus, caule paniculato, floribus subglomeratis.

Sanicula virginiensis alba, folio oblongo-mucronato. Pluk. phyt. t. 222. *f.* 5.

S. vernalis. Sternberg. rev. p. 8.

S. virginiensis. Mich. amer. 1. *p.* 269.

Saxifraga verna. Hortulanorum.

Communicavit Rev. Dom. G. T. Bree.

D. foliis obovatis crenatis subsessilibus, scapo subnudo simplici, floribus congestis. *nivalis.* 2.

Saxifraga nivalis. Linn. sp. pl. 537.—*Smith fl. lap. t.* 11. *f.* 5.—*Lightf. fl. scot.* 1. 221. *pl.* 12.—*Scop. carniol. t.* 14. *f.* 1, 2, 3.—*Deutsch. fl. cum icone.*

Habitat in Scotiæ et Cambriæ montibus, quoque in insula arctica Melville; lecta a Dom. Lieut. Hopner, et mecum communicata, cum 10 aliarum Saxifrageärum, pluribusque aliis arcticis plantis: præcipuè Potentillarum quatuor.

D.? foliis petiolatis, oblongis, obtusis, remotè denticulatis, pilosiusculis, scapo aphyllo, elongato, pubescente, floribus corymbosis. *Sternb.* (*Saxifraga*) *p.* 9. *t.* 14. *elongata.* 3.

α pubescens. HABITAT in Carolina.
β glabra. HABITAT in alpibus Sejanensibus.
OBS. Planta altaica, a virginiensi non nisi glabritie et petalis basi magis angustatis differre videtur. *Sternb. l. c.*
Non vidi. An duæ species?

3. CHONDROSEA. (Saxifraga *Linn. &c.*)

Calyx laciniis suberectis planis parabolicis. *Petala* persistentia, marcescentia. *Germen* truncatim sub-hemisphæricum fere inferum, annulo tumenti. *Stamina* brevia plana, supernè attenuata.

Plantæ perennes acaules duræ, *foliis* radicalibus plus minus lingulatis more Sempervivi dispositis, cartilagineo-dentatis, dentibus farinaceo-marginatis. *Scapi* caulesve floriferi foliosi maxime paniculati. *Flores* sæpe copiosi, inter majores, albi, elegantissimè rubro punctati, formosiores.

* *Genuinæ,* foliis sub-ligulatis chondroseis.

pyramidalis. 1. C. foliis linguæformibus apice obovatis, scapo pyramidali ramosissimo laxo, petalis impunctatis, stylis antherisque carneis.
Saxifraga pyramidalis. Sternb. revis. t. 2.—*Pers. synops.* 1. 486.—*Deutsch. fl. cum icone.*
S. Cotyledon. Linn. sp. pl. cum aliis nimis indefinitè.
S. Cotyledon. Fl. dan. t. 241.—*Nobis in Misc. nat. p.* 158.
HABITAT in Pyreneis.
FLORET Jun. ♃.
INTROD. 1792.

C. foliis angustè linguæformibus longis subintegris, supernè sublatioribus, margine asperato argenteo. *intermedia.* 2. *

Habitat ....

Floret Jul. ♃.

Introd. ante 1808.

Obs. Inter præcedentem et sequentem exactè intermedia. Inter illas forte hybrida. *Flores* fere præcedentis at majores pulchriores petalis rubro valde punctatis punctis confluentibus. *Folia* sequentis potius, at tantillum latiora præcipuè apicem versus.

C. foliis ligulatis longis, caule ramoso subpyramidali, petalis rubro punctatis. *longifolia.* 3.

Saxifraga longifolia. Lapeyr. pyr. p. 26. *t.* 11.—*Pers. synops.* 1. 487.

β *media. Sternb. sax. t.* 1. a.

γ *crustata. Sternb. sax. t.* 1. b.

Habitat in Pyreneis, &c.

Obs. Præcedentibus simillima, foliis longioribus angustioribus, petalis maculis parvis confluentibus lætissimè rubicundis. *S. ligulata. Misc. nat. l. c.*

C. caule recto paniculato, petalis rubro punctatis, germine antherisque luteis. *Aizoon.* 4.

Saxifraga Aizoon. Sternb. sax. t. 3. a.—*Nobis in Misc. nat. p.* 159.

S. recta, foliis radicalibus rosulatis strictis glaucis supinis, incisuris cartilagineo-argenteis, panicula simplici. Lapeyr. pyr. 1. *p.* 33.—*Pers. synops.* 1. *p.* 487.—*Pluk. phyt. t.* 221. *f.* 1. —*Moris. sect.* 12. *t.* 9. *f.* 19—*Barrel. ic.* 1309, 1311, 1312.

Habitat in rupium fissuris Europæ.

β *minor:* foliis sub-duplo angustioribus, minusque cartilagineo-serratis: petalis minoribus.

γ *parviflos*: foliis duplo angustioribus quam α, longioribus minusque albo serratis: petalis duplo minoribus.

Obs. Sequenti valde affinis, differt foliis longioribus angustioribusque, dentibus minus dealbatis: a Ch. ligulata statura minore, floribus minus paniculatis: a Ch. pyramidali, staturâ paniculâque minoribus, foliisque omnino angustioribus. *Synop. suc. l. c.*

rosularis. 5. C. surculis apice rosæformibus, caule recto supernè paniculato subcorymboso, petalis albis rubro parce punctatis.

* *Saxifraga Aizoon, foliis radicalibus aggregatis lingulatis cartilagineo-dentatis, caule simplici racemoso folioso, calycibus glabris. Willd. sp. pl.* 2. 639.—*Deutsch. flora, cum icone.*

S. Cotyledon ε. *Linn. sp. pl.* 1. 570.—*S. foliis radicalibus in orbem positis, serraturis cartilagineis. Fl. lap.* 177. *t.* 2. *f.* 2.—*Barrel. ic. t.* 1310.

S. rosularis hortorum, quoque nobis in Misc. nat. p. 159.—*S. Aizoon* β, *minor, brevifolia. Sternb. sax. t.* 3. b.

Habitat in Pyreneis.

Introd. 1629.

Floret Jun.

Obs. Ch. pyramidali et Ch. ligulatæ simillima, at minor, minusque paniculata, foliorum serraturis magis argenteis. *Misc. nat. l. c.*

Differt Sax. Cotyledone, caule racemoso, et calyce glabro. *Willd. l. c.*

cartilaginea. 6. C. foliis radicalibus aggregatis, lanceolatis, acutis, cartilagineo-serratis, caule simplici racemoso, folioso, glabriusculo, pedunculis glanduloso-

pilosis, calycibus glabris obtusis, corollis immaculatis. *Sternb.* (*sax.*) *t.* 3. c. *p.* 5.
Habitat ad Caucasum. Non vidi.

C. foliorum marginibus cartilagineo-repandis, caule racemoso folioso, calycibus glanduloso-pilosis, petalis lineari-lanceolatis luteis. *mutata.* 7. *
Saxifraga mutata. *Gm. syst. nat.* 2. 704.—*Willd. sp. pl.* 2. 640.—*Bot. magaz.* 351.—*S. mutata. Deutsch. flora, cum icone.*—*Sternb. sax. p.* 6.
Habitat in Europæ alpibus.
Floret Jun. ♂.
Introd. 1793.
Obs. Præcedentibus longe discrepat. Dignoscitur foliorum marginibus minus albis, petalisque luteis. Radix tantummodo biennis.

C. ? foliis radicalibus rosulatis ligulatis integerrimis, petalis staminibusque intra calycem clausis. *calyciflora.* 8.
Lapeyr. pyr. b. c. *p.* 28. *t.* 12.—*Pers. synops.* 1. 487.—*Sternb. rev.* 6.

C. ? foliis radicalibus aggregatis, ligulato-spathulatis, brevi mucronatis, glabris, caulinis glanduloso-pilosis, floribus paniculatis, calycibus coloratis, petalis citrinis. *Sternb. sax. p.* 7. *luteo-purpurea.* 9.
Habitat in rupium fissuris Pyreneorum.

** Ambiguæ, longè minores. Fortè alii Generis. Viventes vix vidi.

† foliis obtusis sæpe induratis.

C. ? foliis coriaceis indivisis alternis glaucis verticalibus subtriquetris, margine membranaceis; rosulis elongatis subcylindricis; petalis longe *Diapensoides.* 10.

ellipticis. *Gaudin* (*sub saxifraga, in Naturwissenchaft,*) No. 9. 1818.

Habitat in Helvetiæ alpibus. Habui a Dom. Philippo Thomas.

Obs. Herba vel parva Suffrutex. *Folia* obovata concava apice retuso-deltoidea perforato-punctata. *Caulis* florifer foliolosus hirsutus 1-7-florus, pilis apice glandulosis. *Petala* angusta. Siccam solum vidi.

Aretioides. 11. C.? foliis radicalibus rosulatis integris, floribus capitatis: petalis linearibus obtusis crenulatis. *La Peyrouse fl. pyren.* (*Saxifraga.*)—*Pers. syn.* 1. 487.—*Deutsch. fl. cum icone.*

Habitat in Pyreneis.

cæsia. 12. C. foliis linearibus perforato-punctatis aggregatis recurvatis, caule multifloro. *Pers. syn.* 1. 487. (*Saxifraga.*)—*Jacq. austr. t.* 374.—*Scop. carn. t.* 15.—*S. recurvifolia. La Peyrouse pyren. p.* 30.

Floret Maio. ♃.

Introd. 1794.

Folia basi ciliata. *Pers. l. c.*

β *laxior. S. cæsia. Deutsch. fl. cum icone.*

patens. 13. C.? foliis coriaceis indivisis alternis patentibus oblongis cæsiis apice et ad margines membranaceas porosis: rosulis abbreviatis, petalis ovatis. *Gaudin in Naturwissen. No.* 9. 1818. *Saxifraga.*—Cæsiæ affinis et forte ejusdem var. insignis, fol. 4-plo majoribus patentibus, lævibus, neque crusta calcarea abductis neutiquam recurvis. *Petala* albida, neque lactea ovata calyce longiora. *Gaudin, l. c.* Siccatam, a Philippo Thomas, solum vidi. Species rariss.

†† foliis acutis: an alii generis?

C.? foliis coriaceis indivisis alternis, triquetris acutis margine membranaceo serrulatis, caule hirsuto subquinquefloro. *Gaudin in Naturwissen. No.* 9. 1818. (*Saxifraga.*) *Vandellii.* 14.

Planta rariss.

Siccatam solum vidi, a Philippo Thomas.

Habitat in alpibus editissimis Valesiæ? et Rhetiæ. *Gaudin, l. c.* ♃.

C.? foliis aggregatis imbricatis triquetris subulatis lævibus, caule subnudo unifloro. *Pers. syn.* 1. 487. (*Saxifraga.*)—*Jacq. misc.* 1. *t.* 17. *Burseriana.* 15.

Habitat in Taurero Rastadiensi. ♃.

Siccatam solum vidi, at non possideo.

β *spinosa. Pers. l. c. La Peyr. pyr. t.* 17. *f.* 1.

C.? foliis lanceolatis mucronatis basi ciliatis imbricatis, caule nudiusculo paucifloro: calycibus mucronatis. *Pers. syn.* 489. (*Saxifraga.*)—*Jacq. collect.* 3. *t.* 17. *tenella.* 16.

Habitat in Carinthiæ alpibus.

Siccatam solum vidi. Non possideo.

Petala (in *Deutsch. fl.* depicta) minuta distantia spatulata alba. *Folia* adscendentia basi ciliata. *Caules* floriferi terminales sub-3-flori minuti, foliolis distantibus. *Germen* pilosum. *Foliola* calycis ovata longe aristatim acuminata, *petalis* paulo longiora.

C.? foliis verticillatis lineari-subulatis, rigidis, mucronatis, basi serrulatis, floribus spicato-capitatis. *Sternb. sax.* 31. *t.* 10. *f. media.* *juniperina.* 17.

Habitat in Caucasi saxis. Non vidi.

nitida. 18. C.? foliis aggregatis, imbricatis, lanceolatis, spinuloso-mucronatis ciliatisque, subtus nitidis, caule nudiusculo, paucifloro. *Sternb. sax.* 32. *t.* 10. b. *f.* 4. Non vidi.

†† Foliosæ, (rarius annuæ, rectimve herbaceæ,) ramis plerumque sempervirentibus; scapis caulibusve valde foliosis.

4. MISCOPETALUM. *Nobis in Synops. succ.* 323. (Saxifraga *Linn. &c.*)

Calyx laciniis 5, erectis. *Corolla* 5-petala, *petalis* oblongo-lanceolatis pedunculatis albis perlepidè rubro punctatis. *Filamenta* filiformia uniformia, *antheris* didymatis. *Germen* superum, *stigmatibus* demum capitulæformibus, fungiformibusve.

Herbæ perennes foliis duris rotundatis inciso-dentatis viridibus, hyeme gradatim marcescentibus; *scapis* solidis tenuiter paniculatis, folio magno peculiari ad singulum ramum altè inciso-dentato.

rotundifolium. M. foliis rotundo-reniformibus grandè crenatis, caulinis dentatis, pallidè viridibus.

1. *Miscopetalum rotundifolium. Nobis in Synops. succ.* 323.

Saxifraga rotundifolia. Linn. sp. pl. 1. 576.—*Deutsch. fl. icon?* nempe petala non pedunculata repræsentantur.

Sanicula guttata. Ger. emac. 7. 88. 1?

Sanicula guttata major. Park. parad. 231. *t.* 233. *f.* 1.—*Sedum sive Sanicula rotundifolia montana major. Moris. hist. sec.* 12. *t.* 8. *f.* 10?

Habitat in alpibus umbrosis.

Floret Jun. ♃.

Introd. Ante Parkinsoni tempora.

β *repandum.* *Sternb. sax. t. 5.* *Saxifraga repanda.*

γ *minus;* foliis rotundo-reniformibus lobatim argutèque duplicato-dentatis, petalis punctis intensioribus.

Saxifraga rotundifolia. Curt. bot. magaz. t. 424. *Herbariique Linnæi.* An propria species?

Obs. Folia altius lobatim inciso-dentata, basi lobis duobus infimis magìs approximatis.

Introd. ante 1790.

Habitat ....

Obs. Mr. Curtis, speaking of *Saxifragæ*, says, "Of this numerous and beautiful tribe of plants, we know of none whose flowers in point of prettiness can vie with those of the present species; they are marked with numerous fine dots, like those of the London Pride (*Saxifraga umbrosa* Linn.), but in a superior style of beauty; and appear to great advantage when viewed with a magnifier." *Curtis l. c.*

Obs. All the *Robertsoniæ* (of which the London Pride is one) are marked in the same manner: and some *Chondrosiæ* (of which the "Pyramidal Saxifrage" is a species) still more beautifully.

M. foliis rotundo-reniformibus duplicatim altèque crenato-dentatis rigidis; lobis duobus infimis sæpe imbricantibus; petalis altius pedunculatis. *majus.* 2. *

Habitat in Siberia.

Floret Mai.—Jun. ♃.

Introd. ante 1812.

Obs. Priore subduplo major, foliis viridioribus altiùsque crenato-dentatis. *Petala* alba, rubro punctata, apicem versus immunia.

Communicavit ex horto Hullense Dom. Gulielm. Donn.

5. LOBARIA. (Saxifraga *Linn. &c.*)

Calyx erectus. *Petala* 5, alba immunia. *Stamina* ...... *Germen* superum. *Styli* breves recti, *stigmatibus* inconspicuis.

Herbæ perennes vel sæpe annuæ, radicibus fibrosis, exiguæ, foliis glabris palmato-lobatis. Viventes vix vidi. Flores non satis examinavi.

hederacea. 1. L. foliis caulinis ovatis lobatis, caule filiformi flaccido. *Linn. sp. pl.* 1. 579. (*sub Saxifraga*)—*Willd. sp. pl.* 2. 658. 46.—*Hort. kew.* 2. 82. *ed.* 2. 3. 72.—*Pers. syn.* 1. 489.

S. cretica, annua, minima, hederaceo folio. Tourn. carn. 18.

HABITAT in Creta. ⊙.

FLORET Jul.

INTROD. 1752.

Vidi solùm siccam.

orientalis. 2. L. foliis subrotundis quinquelobis, caule ramosissimo procumbente. *Willd. sp. pl.* 2. 658. (*sub Saxifraga.*)

Saxifraga, foliis radicalibus rameisque quinquelobis septemlobisve, summis integerrimis bifidisve, caule ramosissimo basi procumbente. Jacq. Obs. 2. *p.* 9. *t.* 34.

Similis S. Cymbalariæ, tamen diversa, an vero satis distincta, a S. hederacea? *Willd. l. c.*

HABITAT in Oriente. ⊙?

Non vidi.

Cymbalariæ. 3. L. foliis caulinis cordatis trilobis integrisque, caulibus procumbentibus. *Willd. sp. pl.* 2. 657. (*sub Saxifraga.*)

S. exigua, foliis Cymbalariæ. Buxb. cent. 2. *p.* 40. *t.* 45. *f.* 2.
HABITAT in Oriente. ☉?
Nunquam vidi.

L. foliis cuneatis quinquelobis, caulinis lanceolatis, floribus paniculatis. *Cavan. ic.* 3. *p.* 25. *t.* 248. (*sub Saxif.*) *cuneifolia.* 4.
Saxifraga cuneata, foliis inferioribus petiolatis cuneiformibus quinquelobis, caulinis sessilibus lanceolatis, caule adscendente paniculato. Willd. sp. pl. 2. 658.
HABITAT in Hispania, montibus frigidis prope Castellfort. ♃.
OBS. Germen semiinferum. *Cav. l. c.*—Germen inferum. *Willd. l. c.*
Nunquam vidi.

L. foliis palmatis quinquelobis, caulinis ovatis; caule basi procumbente reptante. *rivularis.* 5.
Saxifraga rivularis. Willd. sp. pl. 2. 652.—*Engl. bot. t.* 2275.—*Fl. dan. t.* 118.—*Fl. lap. ed. sm. t.* 2. *f.* 7.
HABITAT in rivulis et rupium fissuris irriguis Scotiæ.
FLORET Jun. Jul. ♃.
β *petiolaris.* Sax. petiolaris. *Brown in Ross's voyage to Baffin's bay.*
Foliorum laminis minoribus, petiolis longioribus, sed vix distincta. *Exemp.* 1. *sicc.* apud Baffin's Bay lectum, solùm vidi.
Communicavit amicus Dom. J. E. Gray.
Convenit fere cum fig. S. rivularis in *Sternb. sax. t.* 12. *f.* 3.

reticulata. 6. L.? foliis cordatis, repando-dentatis, reticulato-venosis, caule folioso erecto. *Sternb.* (*saxifraga*) *p.* 21. *t.* 13.

HABITAT in Iberia.

paradoxa. 7. L.? foliis petiolatis, cordatis, reniformibus, sublobatis; pedunculis filiformibus, axillaribus unifloris, petalis calyce connatis, subconcoloribus. *Sternb.* (*saxifraga*) *p.* 22. *t.* 14.

HABITAT in Carinthiæ alpibus ad rivulos Savi. *Sternb. l. c.*

arachnoidea. 8. L.? foliis cuneatis, apice repando-dentatis, caule debili, prostrato, ramosissimo, petalis integris calyces connatu excedentibus. *Sternb.* (*saxifraga*) *p.* 23. *t.* 15.

HABITAT in umbrosis saxosis Tyrolensibus.

Hanc et præcedentem nondum vidi.

cernua. 9. L. foliis palmatis petiolatis, caule bulbifero, germine supero, petalis retusis. *Sm. fl. br.* 1. 453. (*sub Saxifraga.*)—*Willd. sp. pl.* 2. 652.—*Fl. dan. t.* 390.—*Sm. fl. lap. t.* 2. *f.* 7.

OBS. Petalorum figura valde variat.

α retusa. Petalis valde retusis ut in figuris supra citatis.

β obtusa. Petalis obovatis. *Sax. cernua. Engl. bot. t.* 664.

γ acuta. Petalis acutis. *Sax. cernua. Fl. dan. t.* 22.

HABITAT in Lapponia; β in Scotiæ; γ Norwegiæ alpibus.

FLORET Jun. ♃.

Flos parum nutat. *Folia* caulina glabra, magis palmata, et germen supra receptaculum, magis quam in antecedente, ut distinctissima a priore

planta. Videtur tamen affinis S. sibericæ, licet et ab hac distincta. *Variat* caule ramoso. *Willd. l. c. ex Linn. sp. pl.*

An Sax. bulbifera, palmato-lobatis foliis, *Linn.?*—In figura apud *Engl. bot.* 664, germen annulo tumenti superum.

L. foliis reniformibus palmato-pilosis, caule pedunculisque filiformibus. *Linn. sp. pl.* 1. 577. (*sub Saxif.*)—*S. grandiflora. Sternb. sax.* 20 *et* 57. *et t.* 12. *f.* 4. *siberica.* 10.

Habitat in Siberia. ♃.

Radiculæ capillares. *Folia* radicalia petiolata, reniformia, septemloba s. palmata: lobis ovatis, pilis raris adspersa, petiolis hirsutis. *Caulis* filiformis, adscendens, semipedalis, debilis, *foliis* 2. s. 3. sessilibus, palmatis. *Pedunculi* terminales, et laterales longissimi, filiformes, bifidi, nudi. *Flos* majusculus, albus inferus. *Linn. l. c.*

Non vidi vivam.

6. TRIDACTYLITES. (Saxifr. *Linn. &c.*)

Calyx erectus. *Petala* 5, alba immunia. *Stamina* filiformia, uniformia. *Germen* inferum, urniforme. *Styli* breves patuli, stigmatibus inconspicuis.

Herbæ annuæ, s. perennes, exiguæ, foliis semper plus minus digitatis et pubescentibus.

Tr. foliis caulinis cuneiformibus trifidis alternis, caule erecto ramoso. *Linn. sp. pl.* (*sub Saxifr. tridactylites*) *vol.* 1. *p.* 578.—*Curtis lond. t.* 28. —*Deutsch. fl. cum icone ?*—*Saxifraga annua. Peyr. p.* 39.—*Saxifraga tridactylites* (*annua*). *Pers. synops.* 1. 490. *annua.* 1.

HABITAT supra muros antiquos. ☉.
FLORET vere.

petræa. T. foliis caulinis palmato-tripartitis laciniis subtrifidis, caule ramosissimo laxo. *Linn. sp. pl.* 1. 578. (*sub Saxifr.*)—*Sax. controversa. Sternb. sax.* 43. *t.* 16. *et Sax. Bellardi, p.* 20. Sed *Saxifraga Bellardi. Allion. pedem.* 72. *t.* 88. *f.* 1, est mera pygmæa varietas; potiusve eadem imperfecta, monstrosave. H. ♂.
2.
HABITAT in alpibus Sueciæ, &c.

7. SAXIFRAGA. *Linn. gen. pl.*

Calyx patulus erectusve. *Petala* 5, exunguiculata alba immunia. *Stamina* filiformia uniformia. *Germen* semiinferum, inferumve (*E. b.* 501. 794. 2278). *Styli* divaricati, in *stigmatibus* spatulæformibus finientes.

Herbæ perennes, rarissimè annuæ, radice (S. granulata excepta) fibrosa. *Folia* petiolata sensim marcescentia, vel in paucis omnino annua, cæspitosè, sive rosulatim sæpe digesta, lobata, vel palmatifida, pedatifidave; semper carnosula quoque viridia, sæpe ciliatim pubescentia. *Flores* graciliter racemosi vel paniculati, semper albi, vel rarissimè apicem versus externè tincturâ rubedinis. Genus tamen forte dividendum.

* BULBIFERÆ: foliorum axillis radicibusve bulbiferis, foliis lobatis.

granulata. S. foliis caulinis palmato-lobatis, caule racemoso, radice granulata.
1. *Saxifraga granulata. Linn. sp. pl.* 576.—*Engl. bot. t.* 500.—*Deutsch. fl. cum icone.*

HABITAT in pratis pascuisve Britannicis, imprimis solo glareoso.

FLORET Maio. ♃. Valde variat

α *vulgaris*, floribus mediocribus.

β *grandiflora*, floribus plus triplo majoribus speciosis, foliis magis cucullatis.

γ *leptopetala*, petalis longe angustioribus, longis.

δ *plena*, floribus pulcherrimè plenis.

ε *fibrosa*, radice fibrosa absque granulis, petalis magnis. In horto Rev. D. Bree, spontanea, vel potius a seminibus varietatis β.

Varietates β et γ in comitatu Warwicensi legit spontaneas, mecum quoque communicavit, amiciss. Bree, Saxifrageärum cultor eximius.

ζ *gemmifera*, foliis caulinis palmato-lobatis, caule ramoso, ramis racemosis; radice fibrosa.

HABITAT fortè in Anglia.

FLORET Maio. ♃.

Communicavit amicus Dom. Aiton, ex regio horto Kewense, nomine Sax. granulatæ.

Flores minores quam in Sax. granulata α, albi, magis approximati, at paniculâ magis ramosâ. *Folia* omnia vernalia post florescentiam marcescentia: nova autumnalia quasi in gemmas foliosas collecta.

S. foliis palmato-lobatis, caulinis sessilibus, caule ramoso bulbifero. *Linn. et Pers. syn.* 1. *p.*489. —*Moris. sect.* 12. *t.* 9. *f.* 24.—*Deutsch. fl. cum icone.* *bulbifera.* 2.

HABITAT in Italiæ pratis saxosis, inque Norwegia. ♃.

Nondum vidi vivam.

β *veronicæfolia*, foliis inferioribus subrosulatis cordatis crenatis, petiolis breviusculis dilatatis, caulinis sessilibus inciso-dentatis acutis, caule-

que simplicissimo subvilloso ; floribus 2 subcapitatis.

Habitat in Helvetia et Hispania, radice subtuberosa. Veron. arvens. refert *Persoon l. c.*

γ *arctica*, foliis acutioribus. Ex insula arctica Melville a Dom. Lt. Hopner, R. N. lecta.

* PALMATIFIDÆ, foliis palmato-lobatis altifidis.

altifida. 3. * S. foliis altè palmato-tripartitis, laciniis profundè 2—5-fidis ; pedunculis subracemosis divaricantibus ; radice fibrosa.

Saxifraga adscendens. Nobis (exclusis synonymis) in Misc. nat. 162, non aliorum.

Obs. Valde affinis Sax. granulatæ, at omnino distincta, foliorum fissuris atque radice : caulibus magis decumbentibus. In horto amat humidum solum, septentrionali aspectu, absque arborum umbra. Bona atque conspicua species.

Habitat . . . non in Britannia.

lanceolata. 4. * S. (spear-bracted) foliis glabris ciliatis, rosarum 7-fido-palmatis ; stolonum brevissimorum erectorum 5-3-fidis : caulinis lanceolatis : petalis rotundo-obovatis. *Nobis in Synops. succ.* 324.

Habitat in Europæ alpibus.

β *minor*, foliis glabris ciliatis trifidis integrisque, caulinis imis spatulato-lanceolatis : petalis oblongo-cuneiformibus distinctis. Duplo triplove minor quam α, foliis petiolisque valde diversis. Forte propria species. Vidi apud Dom. Loddiges, ante 1808.

γ *obtusa*, foliis basi cuneiformibus obovatisve, rosarum 1-3 altè dentatis subfissisve : stolonum

sæpè obovatis: caulinis imis ellipticis: petalis orbiculato obovatis.

Vigebat in regio horto Kewense, A. D. 1820. Forte propria species.

** PEDATIFIDÆ, ramis vernalibus demum plus minus decumbentibus, subinde substoloniformibus: foliis præcipuè rosarum reniformi-subpedatifidis.

S. rosarum foliis reniformibus 5-partitis multifidis: caulinis 3-partitis incisis. *Geranioides.* 5.

Sax. Geranioides. Linn. sp. pl. 578.—*Willd. sp. pl.* 2. 652.

Habitat in Pyrenæis.

Floret Maio.

Introd. 1770.

Obs. Planta subviscida.

S. foliis 5-partitis lobis multifidis: caulinis digitatis: caule paniculato multifloro: petalis oblongis calyce plus duplo longioribus: stylis innuptis filiformibus. *Ranunculoides.* 6.

Saxifraga irrigua. Sternb. sax. p. 60.

Obs. Planta ante florescentiam omnino Ranunculæformis. Inde nomen, sed diffidentèr mutavi.

Habitat in Tauriæ subalpinis.

S. foliis palmatis 5-partitis, lobis multifidis, acutis, caule adscendente, simplici, paniculato, petalis integris. *Sternb. sax. p.* 48. *t.* 29. *f.* 1. *aquatica.* 7.

Habitat ad rivulas Pyrenæorum.

S. foliis nervosis, cuneato- 3-5-fidis aut palmato-3-partitis, lobis divisis, caule erecto, viscido, *heterophylla.* 8.

calycis laciniis profundè partitis, petalis calyce duplo majoribus. *Sternb. sax. p.* 50. *t.* 20.
Habitat in alpibus Pedemontanis.

Ponæ. 9. S. foliis petiolatis, 3- aut 5-partitis, laciniis sub-3-fidis, obtusiusculis, caule ramosissimo, adscendente, petalis calyce 3-plo majoribus emarginatis. *Sternb. sax. p.* 47. *t.* 28.
Habitat in saxosis Montis Badi.
Non vidi.

pedatifida. 10. S. foliis reniformibus pedatifidè 7-9-lobis: caulinis palmatis, digitatis, linearibusve: caule paniculato: petalis oblongo-obovatis.
Saxifraga pedatifida. Engl. Bot. t. 1278. (excl. Donnii synon.)
Habitat in Scotiæ montibus.
β *minor*, 2-3-plo minor villosior. Cum α, communicavit amiciss. Bree.

viscosa. 11. * S. rosarum foliis pedatifidis: stolonum erectorum 3-5-fidis: caulium trifidis lanceolatisque trinerviis: caulibus hirsutis. *Nob. in Misc. nat.* 164.
Præcedenti affinis, at longè minor et subviscosa.
Habitat . . . .

quinquefida. 12. * S. stolonum sub-erectorum foliis 5-fidis, laciniis lineari-lanceolatis, lineola longitudinaliter subexaratis. *Nobis in Misc. nat. p.* 163.—et inde in *Donn's cant. ed.* 5. 107.
Habitat in Scotiæ montibus, a Dom. Geo. Donn ante annum 1801 detecta.
A penultima longè recedit, et propria species. Rosarum folia 5-11-pedatifida. Priore duplo major, et omnino distincta.

*** CERATOPHYLLÆ, rosarum foliis trifidis 5-fidisve, lobis trifidis linearibus patulis, sæpe duris et viscidè pubescentibus, nervis senectis plus minus induratè elevatis.

S. glabra, foliis radicalibus trilobis, lobis multifidis: laciniis lateralibus falcatis; caule paniculato, calycibus fucatis. *Ait. hort. kew. ed.* 2. *v.* 3. *p.* 70. *ceratophylla.* 13.
HABITAT in Hispania.

S. foliis (*digitato*-) 5-lobis, lobis elongatis, linearibus, obtusis, staminibus longitudine calycis, pistillis subulatis. *Sternb. sax. p.* 51. *pentadactylis.* 14.
HABITAT in umbrosis Pyrenæorum.

S. foliis gummiferis petiolatis 5-lobis, lobis integris subpaniculatis. *Sternb. sax. p.* 50. *ladanifera.* 15.
HABITAT in Pyrenæis altioribus.

S. foliis petiolatis subviscidis, tripartitis, laciniis linearibus, carinatis bi-trifidis, lacinulis mucronulatis, caule subfolioso, nudo, paniculato, petalis obtusis integerrimis. *Sternb. sax. p.* 49. *trifurcata.* 16.
HABITAT in Hispania.
Non vidi.

S. foliis 3-5-lobis, lobis obtusis una cum caule pubescentibus, floribus capitatis. *Sternb. sax. p.* 53. *pubescens.* 17.
HABITAT in alpibus Pyrenæorum.

S. foliis radicalibus reniformi-cordatis, palmato-partitis, laciniis linearibus, caulinis subsessilibus, cuneatis, tri- vel 6-partitis. *Sternb. sax. p.* 51. *t.* 21. *dichotoma.* 18.
HABITAT in Hispania.

venosa. 19. * S. subacaulis, foliis simplicibus trifidisque nervosis, scapo 1-floro folioso, foliis scapi linearibus integris.

Habui ex arctica Insula Melville, a Dom. Lt. Hopner, R.N. lectam, communicatam.

Obs. Flores solitarii, et majores fere duplo quam in priore.

moschata. 20. S. foliis radicalibus aggregatis, linearibus, integris trifidisque, una cum caule glutinosis, hirsutis, floribus longè pedunculatis. *Sternb. sax.* 41. *t.* 11, *a. f.* 3.

Lapeyrousii. 21. S. foliis palmatis, enerviis, glandulosis, petiolis basi marginatis, floribus tubulosis. *Sternb. sax. p.* 51.

Habitat in alpibus Pyrenaicis.

Non vidi. An hujus sectionis ?

nervosa. 22. S. foliis lobatis utrinque nervosis, calycibus globosis, corollis patentibus, pistillis subulatis. *Pers. syn.* 1. 490.—*Sternb. sax. p.* 52.

Obs. Flores subpaniculati, foliis bracteaceis sæpe tricuspidatis.

β *exarata*, caule assurgente, foliis digitatis, segmentis obtusis, petalisque supernè exaratis.

Sax. exarata. Vill. delph. 3. *p.* 674.—*Sax. nervosa*, β (*minor*). *Sternb. sax. p.* 52.

Obs. Flores subpaniculati, foliis bracteaceis 5-3-cuspidatis.

*** QUINQUEFIDÆ, rosarum foliis sæpe 5-fidis, rarius 3-fidis 7-fidisve; nunquam rectim pedatifidis.

Ajugifolia. 23. S. foliis radicalibus reniformibus palmato-quinquepartitis, caulinis linearibus indivisis, cauli-

bus adscendentibus multifloris. *Linn. sp. pl.* 1. 578.

β *Aitonis*, foliis stolonum prostatorum 3-5-fidis, obsoletè subpedatis, laciniis lineari-lanceolatis aristatis, petiolis duplo longioribus.

Saxifraga ajugifolia. Ait. kew. ed. 2. *v.* 3. *p.* 70. —*Nobis in Misc. nat. p.* 163.—*Vix Linnæi.*

Habitat in Galloprovinciæ montibus.

Circa A. D. 1790, Curtisius hanc varietatem accepit e regio horto Kewense, nomine S. ajugifolia. Ego a Curtisio circa 1793.

γ *longipes*, plus duplo major, petiolis prælongis. A Rev. G. T. Bree.

S. rosarum foliis 5-fidis, stolonum trifidis, laciniis lanceolatis amplis; petalis oblongo-obovatis. *hibernica.* 24.

Habitat in Hiberniæ montibus, ubi maximè variabilem legit amiciss. Bree.

α *major*, caulibus laxe effusis, subpedaiibus: varietatibus cæteris duplo major.

β *Smithii*, duplo minor, sive triplo tenuior. *Sax. hirta. Engl. bot. t.* 2291.—*Nec nobis in Misc. nat.*; quæ nondum spontanea in Britannia.

γ *media*, nodis duplo brevioribus, foliis mediocribus in latitudine.

δ *incurva*, longe brevior, foliis subincurvis 9-5-fidis, petiolis latis. *Sax. incurva hortorum.*

ε *pusilla*, caulibus triplo brevioribus quam γ, foliisque angustioribus quam δ.

ζ *perpusilla*, acaulis; omnino humilior, densior, rosarum foliis magis divisis, caule nudiusculo subbifloro.

Saxifraga cespitosa. Engl. bot. t. 794, et inde *Nobis in Misc. nat.* 166. Sed nullo modo Linnæi Herbarii, quod continet exempla plurima

S. cespitosæ veræ, uno horum solùm a ceteris discrepante, altiore magisque ciliato.

HABITANT omnes supradictæ varietates subspeciesve in Hiberniæ montibus, teste Dom. G. T. Bree aliisque. Sed nondum in Scotia, Cambriave.

grœnlandica. 25. S. foliis caulinis palmato-multifidis sparsis : laciniis acutis, caule erecto. *Linn. sp. pl.* 578, excluso Dilleniano synonymo, quod repræsentat Saxifragam veram muscoidem.

β *arctica*, omnino glabrior, e Insula arctica Melville, a Dom. Lt. Hopner lecta.

quinquedens. 26. * S. nuda ; stolonum virgatorum foliis 5-3-fidis remotis, longitudine internodiorum, laciniis subulatis aristatis æquantibus ciliatos petiolos : petalis orbicularibus.

Saxifraga quinquedens. Nobis in Synops. succ. 325.

HABITAT . . Nondum in Britannia. Affinis S. Hibernicæ, at gracilior, magisve virgata, et differt omnino petalis amplissimis.

lævis. 27. * S. rosarum foliis 5-fidis : stolonum prostratorum 5-3-fidis, petiolis ciliatis, petalis amplis.

Sax. lævis. Nob. in Misc. nat. 165.—*Sax. palmata. Deutsch. flora? cum icone :* sed non *S. palmata Engl. bot.* 455.

HABITAT prope Settle, in Com. Ebor., ubi olim invenit D. Curtis, et communicavit. Nuper detecta apud montem Hellvellyn, a Rev. Dom. G. T. Bree. Bona species.

peruviana. 28. S. foliis cuneiformi- 3- vel 5-partitis, glanduloso-pubescentibus, floribus subternis, terminalibus. *Sternb. sax.* 55. *t.* 22.

Habitat in Andibus Peruvianis.
Non vidi.

S. foliis spathulatis, integris et cuneato-tridentatis, in petiolum decurrentibus, subtus scabriusculis, caule paucifloro, petalis calyces campanulatos vix superantibus. *Sternb. sax.* 42. *t.* 11. a. *f.* 5. *depressa.* 29.

S. foliis palmato-5-fidis 3-fidisque, laciniis linearibus, piloso-mucronulatis, una cum caule adscendente villosissimis, surculis cespitosis, diffusis, adscendentibus. *Sternb. sax.* 55. *decipiens.* 30.

Habitat in montibus Germaniæ, Angliæ. Maximè variat, at semper piloso-canescens.

α *decipens. Sternb. sax. decipiens, t.* 23.

β *palmata. Sax. palmata,* foliis palmatis 5-fidis trifidisque, caule folioso paniculato, petalis subrotundis. *Engl. bot.* 455.—*Nob. in Misc. nat.* 164.

Obs. Planta brevior, magisque compacta, quam α, et fere acaulis cespitosa.

γ *canescens ; Sax. canescens,* foliis stolonum cuneatis semper 3-cuspidatis hirtis, caulinorum supremorum sæpius integris : petalis ellipticis non imbricatis. *Nob. in Synops. succ.* 325.

δ *hirsuta ; Sax. hirsuta,* foliis stolonum trifidis, petiolis longitudine internodiorum, petalis ovalibus non imbricatis. *Nob. in Synops. succ.* 325. —Quam prioribus varietatibus minus cespitosa, surculis gracilioribus, triplo longioribus.

ε *hybrida ; Sax. hybrida,* foliis stolonum trifidis, caulinis lanceolatis, caulibus (surculis) hirto-lanatis. *Nob. in Misc. nat. p.* 164. Var. δ. similis at duplo robustior, stolonum foliis simplicioribus, petalis valde latioribus imbricantibus.

ζ *Sternbergii ; Sax. Sternbergii,* foliis palmatis, 5-fidis 3-fidisque, laciniis sublinearibus, obtusis,

inermibus, ciliatis, glabris, caule adscendente superne piloso, surculis cespitosis, rigidulis. *Sternb. sax. p.* 56. *t.* 24.

Non vidi, sed simillima Sax. hibernicæ, *α, majori* supra, et fere eadem, at diversis petalis.

η controversa ; Sax. controversa hortorum Londinensium, nec Sternbergii.—Præced. var. similis, sed brevior, foliis longe obtusioribus, sive obtusissimis.

θ condensata ; Sax. condensata hortorum. Ultimæ var. statura, at foliis duplo angustioribus acutis. An var. S. hibernicæ ? E siccis *η* et *θ* descripsi.

hirta. 31. * S. foliis stolonum caulinisque imis trifidis, laciniis margine ciliatis, paginis præcipuè subtus glabris. *Nob. in Misc. nat. p.* 164.

Species bona, petalis orbiculato-ovatis albis triplilinea virescente. An affinior S. quinquefidæ ?

Habitat in Europa, non in Britannia.

platypetala. 32. S. rosarum foliis 5-fidis : stolonum 3-fidis, rariùs integris, laciniis acuminatis : floribus crateriformibus, petalis oblongo-orbicularibus imbricantibus. *Sax. platypetala. Engl. bot.* 2276.

Habitat in Cambria, insuper Snowdon, ubi legit amicissimus Bree. Bona species. Petala amplissima alba, altè ad latera imbricantia, nervis virescentibus fere ad apices obtusissimas.

Hypnoides. S. foliis 7-5-fidis integrisque, petalis oblongis obovatisve, non imbricantibus. Maxime variat.

33. *α Sax. hypnoides*, foliis caulinis linearibus integris trifidisve, stolonibus procumbentibus, caule erecto nudiusculo. *Linn. sp. pl.* 579.—*Engl. bot.* 454.—*S. densa ;* stolonum foliis subulatis semi-teretiusculis, rosarum trifidis. *Nobis in Misc. nat.* 166.

β *angustifolia*; *S. angustifolia. Herb. Banks*, teste lynceo Dicksono.—Et inde S. angustifolia stolonum foliis lineari-lanceolatis imis rarissime, rosarum sæpius trifidis. *Nob. in Misc. nat.* 166.

Habitat in Westmorlandia in montosis prope Brough.

γ *leptophylla*; *S. leptophylla*, procumbens glabra, foliis longè petiolatis 3-fidis 5-fidisque, laciniis linearibus divaricatis.

δ *Aitoni*; *S. hypnoides* β, procumbens foliis linearibus integris 3-fidis et 5-fidis. *Linn. sp. pl.* 579.—S. hypnoides. *Ait. kew. ed.* 1. *v.* 2. *p.* 83, et inde Angliæ omnium hortorum.

Habitat prope Hessleton Gill, in Craven, ubi legit amicissimus Bree, at forte ex horto.

Obs. I have known this plant from a boy, and upward, in almost every garden, by the name of Common Ladies' Cushion, or Moss Saxifrage; and it is nearly or quite the plant called *S. hypnoides* in the *Linn. herb.*, although it is var. β. of *Sp. pl. l. c.*

ε *spatulata*; stolonum foliis summis spatulato-linearibus cuspidatis, imis 2-3-cuspidatis, rosarum 5-fidis. *S. spatulata. Nob. in Misc. nat. p.* 165.

ζ *latifida*; foliis lanceolatis, 3-fidisve; caulinis intermediis obovato-cuneatis acuminatis: floribus subpaniculatis, petalis subrotundo-obovatis imbricatis.

S. latifida. Nob. in Synops. succ. p. 325.

Subspecies insignis, floribus rarissimis infernè subsericeo-albis.

η *rhodopetala*; foliis simplicibus 3-5-fidisve, petalis fere omnino (basive excepto) roseis.

E septentrionalibus Angliæ montibus, communicavit amicissimus Bree. Varietas pulchella.

θ *recurvula*; (recurving cupped) rosarum foliis 5-fidis minutis, stolonum profundè trifidis, laciniis lineari-acuminatis: foliolis calycinis deltoideo-acuminatis patenti-recurvantibus.

HABITAT in Cambriæ Cym Idwell, ubi legit amicissimus Bree.

Subspecies insignis; dignoscitur foliis altè 3-fidis laciniis (omnium fortè) tenuissimis; foliolis calycinis patenti-recurvantibus.

ι *aristata*; sordidè virescens; rosarum foliis carnosulis 5-fidis, stolonum ramiformium glomeratorum trifidis, laciniis hirto-ciliatis, aristatis.

E Scotiæ montibus communicavit amicissimus Bree. Varietas insignis.

κ *septifida*; *S. septifida*, stolonum brevium prostratorum 7-3-fidis confertis ciliatis, laciniis linearibus subcuspidatis; petiolis longitudine internodiorum. *S. septifida. Nob. in Syn. succ.* 324.

globulifera. 34. S. foliis radicalibus imis spathulatis integerrimis, superioribus palmato- 3- aut 5-fidis, in ramo florifero remotis, linearibus. *Sternb. sax. p.* 45.

HABITAT in cacumine Atlantis.

Non vidi.

An a priore satis distincta?

trifida. 35. * S. foliis rosarum stolonumque suberectorum trifidis, laciniis petiolisque nudis ciliatis; segmentis calycum parabolicis.

S. trifida. Nob. in Misc. nat. p. 165.

HABITAT in Cambriæ montibus.

OBS. Foliorum laciniis lateralibus subulatis petiolo triplo brevioribus. Rosarum folia rarius 5-fida. *Flores* racemoso-paniculati. *Petala* subrotundo-ovata ampla.

β *elongella*; *S. elongella.* Leaves in three or five

bristle-pointed segments; their base elongated; the uppermost linear and undivided. Flower-stalks very long and naked. *Engl. bot. t.* 2277.

Habitat in Scotiæ montibus.

γ *tridens*; *S. tridens*, foliis ciliatis, rosarum 5-fidis; stolonum brevium suberectorum trifidis confertis; laciniis linearibus calycumque segmentis acutis: petiolis internodiis brevioribus: petalis elliptico-oblongis distinctis. *Nobis in Syn. succ.* 324.

Habitat in Scotiæ montibus.

*** INTEGRIFOLIÆ: spuriæ: foliis integris primave specie subinde 1-3-dentatis.

S. foliis lanceolatis obtusis pilosis, caule nudo bifloro. *Linn. sp. pl.* 571. *Androsacea.* 36.

Obs. *Herba* acaulis exigua, radice perenni, foliis integris, scapoque fere ut in Androsace villosâ.

β *trifida*, subcaulescens; foliis plerumque trifidis. *Sternb. sax. t.* 11. a. *f.* 4.

Habitat in Pyrenæis.

Var. β. non vidi. An distincta?

S. foliis basilaribus densissime congestis, oblongis, obtusis, una cum caule pilosis, petalis subretusis, citrinis, calyces excedentibus. *Sternb. sax.* 28. *t.* 7. *f.* 3. *planifolia.* 37.

Habitat in Pyrenæis.

An hujus generis?

S. foliis basilaribus confertis, lineari-lanceolatis, piloso-ciliatis, floribus longè pedunculatis, petalis ovatis acutis, calyce brevioribus. *Sternb. sax. p.* 27. *t.* 7. *f.* 2. a. *Sedoides.* 38.

β *uniflora. Sternb. sax. p.* 27. *t.* 7. *f.* 2. b.
Habitat in Pyrenaicis.

Seguieri. 39. S.? subacaulis, foliis lineari-lanceolatis longis: scapo subnudo 1-2-floro, petalis oblongo-linearibus luteis.
Saxifraga planifolia, γ Seguieri. *Sternb. sax. p.* 28. *t.* 9. b. *f.* 4.
Habitat in Pyrenæis. Vix hujus generis. *Exemp. sicc.* solum vidi hujus, duarumque præcedentium.

tenera. 40. S. foliis mollibus integerrimis, oblongis, obtusiusculis, subhirsutis, radicalibus aggregatis, caulinis alternis, caule simplici paucifloro: petalis latè cuneatis retusis.
Sax. planifolia β, *tenera. Sternb. sax.* 28. *t.* 9.b. *f.* 3.
Non vidi; sed ob petalorum formam distincta.

Hohenwarti. 41. S.? foliis basilaribus confertis, lanceolatis, piloso-mucronatis, caule folioso, petalis linearibus, longitudine calycis, antheris roseis.
Sax. Hohenwarti. Sternb. sax. p. 26. *t.* 7. *f. media.*
Habitat in Carinthiæ alpibus.
β petalis antherisque purpurascentibus. *Sternb. l. c. t.* 19. b. *f.* 2.
Non vidi. Penultimæ valde affinis. Sed vix hujus generis.

8. MUSCARIA. (Saxifraga *Linn. &c.*)

Germen inferum, superne depressum. *Styli* patuli, stigmatibus spatulæformibus. *Petala* angusta distantia lutea.
Herbæ exiguæ omnes, cespitosæ; foliis integris trifidisve linearibus.

* VERÆ.

M. foliis rosarum aggregatis trifidis, scapo gracili subërecto paucifloro, floribus citrinis sessilibus. *muscoides.* 1.

S. muscoides. Jacq. misc. nat. 2. *p.* 128.—*Nobis in Misc. nat. p.* 167.

S. tridactylites grœnlandica, caulibus valde foliosis. Dill. elth. t. 237. *f.* 329. *bona.*

Habitat in Scotiæ montibus. D. Donn.

Folia sæpius 3-fida, rarius integra, linearia obtusa.

β *elongella,* foliis remotè ciliatis, rosarum sæpe trifidis, cæteris linearibus integris, caule pubescente subbifloro.

S. elongella. Nob. in Misc. nat. p. 167.—*Donn's hort. cant. ed.* 5. 107. Non *Engl. bot.*

S. Muscoides. Deutsch. fl. cum icone.

Habitat in Westmorlandia, et, ni fallor, etiam insuper Ingleboro.

Floret Maio. ♃.

Folia longiora graciliora tenuioraque, sæpiusque integra, latitudine semilineari, longitudine 6-7-linearibus, pilis glanduliferis remote ciliata, certo situ subtus minime papuloso-micantia. *Caules* substricti subaphylli. *Flores* præcedentis, at tenuiores.

Obs. *S. elongella. Engl. bot.* 2277, longè diversa est.

M. foliis stolonum lineari-lanceolatis obtusis subciliatis, rosarum trifidis, racemo valde folioso, 2-6-floro, pubescente. *cæspitosa.* 2.

S. cæspitosa. Linn. sp. pl. et ejus herb.

S. pygmæa nobis in Misc. nat. p. 168.

S. moschata. Engl. bot. t. 2314.

Habitat in Scotiæ montibus. Dom. Donn.

Floret Maio. ♃.

Præcedente plus duplo minor.

Scapi unciales densissime cæspitosi. *Folia* sæpe latiora, sed fere duplo breviora obtusè sublanceolata nec linearia. *Calycis* laciniæ petalaque latiora brevioraque.

acaulis. 3. M. foliis trifidis integrisque, densissime imbricatis, scapis 6-13-linearibus filiformibus subunifloris, superne subfoliosis.

S. acaulis. Seringe in Naturwissenshaftlicher, No. 10. *p.* 68.

Habitat prope M. Fouly. Vide *l. c.*

Dua exempla sicca nativa trientalia a Ph. Thomas, solum vidi.

Forte mera varietas præcedentis.

An S. muscoides γ, *uniflora,* operis super citati, p. 69?

magellanica. 4. * M.? foliis congestis, viscoso-pubescentibus simplicibus, floribus subbinatis subsessilibus.

S. magellanica. Sternb. sax. 39. *t.* 11. *f.* 1.

S. magellanica. Pers. syn. 1. 491.

Habitat ad Fretum magellanicum in alpibus.

Planta cæspitosa, petal. obovata. *Pers. l. c.*—An hujus generis?

** AMBIGUÆ.

crocea. 5. M.? foliis integris trifidisque, pedunculis erectis elongatis foliolosis: terminali brevissimo, petalis calycem vix æquantibus.

S. crocea. Sering. in loco supra citato, p. 69.

Habitat in Sabaudæ Australioris alpibus.

atropurpurea. 6. M.? foliis integris trifidisque, aut fere omnibus integris, linearibus angustis, petalis (linearibus) atropurpureis.

S. moschata, γ, atropurpurea. Sternb. sax. 41. *t.* 11. b. *f.* 2.

HABITAT in Carniola.

Non vidi.

Planta singularis ob tenuitatem coloremque petalorum.

M.? foliis lanceolato-ovatis, integris, trifidisque, caule aphyllo, unifloro, petalis acutis linearibus citrinis. *stenopetala.* 7.

S. aphylla. Sternb. sax. 41. *t.* 11. b. *f.* 3.—*S. stenopetala. Seringe in Naturwissenschaftlicher, No.* 10. *p.* 70.

HABITAT in Austriæ alpibus.

Præsingularis ob foliorum latitudinem, tenuitatemque petalorum.

Non vidi.

9. LEPTASEA. Leptanthidem nominaveram olim: nunc voco Leptaseam, propter nomen Leptanthes in Sprengel, &c. (Sax. *Linn. &c.*)

Calyx horizontalis planus, laciniis oblongo-parabolicis. *Petala* angusta oblongo-lingulata remota exunguiculata aurea. *Germen* superum depressum.

Herbæ perennes, rigidæ, parvæ.

L. foliis caulinis linearibus alternis dentato-ciliatis, caule decumbente. *Aizoides.* 1.

Sax. Aizoides. Sm. fl. brit. 452.—*Engl. bot. t.* 39.—*Fl. dan. t.* 72.—*Schmidel's Gesner, fig.* 4, *et forte* 5.

Sax. autumnalis. Linn. sp. pl. 575.—*Deutsch. fl. cum icone.*

β *integra*; foliis sæpe integris linearibus obtusis.

Sax. Aizoides. Linn. sp. pl. 576.
HABITAT in Britanniæ montibus.
FLORET Jul.—Aug. ♃.
γ *crocea*, floribus croceis, aurantiisve, caulibus elongatis.

tricuspidata. 2. L.? foliis radicalibus aggregatis cuneiformibus ciliatis acute tridentatis, caule adscendente racemoso, petalis lanceolatis calyce triplo longioribus.
Sax. tricuspidata. Fl. dan. t. 976.
HABITAT in Grœnlandia.
Exemp. sicc. sine flore, a Lt. Hopner lecta prope Baffin's bay, et mecum communicata, solum vidi. Forte alii generis.

10. HIRCULUS. *Hirculus* Clusii. Saxifraga *Linn. &c.*

Calyx erectus laciniis sub-ellipticis. *Germen* grande, subovatum, superum. *Stigmata* grandia, rotundata. *Petala* magna (inter affines) exunguiculata elliptica aurea, " basi lacuna nectarifera rima bivalvis apicibus acutis instructa." *L.*
Herbæ humiles palustres perennes, ramis sæpe decumbentibus, foliis marcescenti-deciduis.

Ranunculoides. 1. H. hirtus; foliis lanceolatis, longe petiolatis, surculis decumbentibus, radice repente.
Sax. Hirculus. Linn. sp. pl. 576.—*Engl. b.* 1009. —*Fl. dan.* 200.—*Fl. lond.* 6. 26.—*Gmel. fl. sib.* 4. 165. *t.* 65. *f.* 3.—*Deutsch. fl. cum icone.*
HABITAT in Angliæ palustribus, at rarissimè.
Folia viridia rarius ciliata. *Caules* floriferi erecti,

foliis alternis pedetentim minoribus, subbiflori, fusco-pilosi.

H. nudus : foliis radicalibus spatuliformibus, caule folioso unifloro : surculis erectis. *propinquus.* 2.

Sax. propinqua. R. Brown, in Ross's voyage.

Exempla tria sicca, in Insula arctica Melville lecta a Lt. Hopner (et cum sequente mecum communicata) solum vidi. Bona et formosa species, floribus intensè luteis solitariis.

Radix habet fibras longas simpliciores.

Habitat cum Hypno rufescente, intermixto.

H. foliis obovatis subsessilibus ciliatis, sarmentis longissimis arcuatis filiformibus, apice solum foliosis et radicantibus. *flagellaris.* 3.

Sax. flagellaris. Sternb. sax. 25. *t.* 6. Figura parva sine plantulis radicantibus apice surculorum flagelliformium.

Habitat cum priore, at formosior, et præsingularis.

Radix simplex, fibrosa. *Caulis* valde foliosus biflorus. *Flores* magni intense lutei, petalis subrotunde obovatis.

An Sax. setigera, (a Browneo citata) fl. parv. alb. *Pursh Americ. p.* 312?

11. CILIARIA. (Saxifraga *Linn.* &c.)

Calyx laciniis horizontalibus concavis. *Petala* orbiculato-ovata ampla unguiculata. *Germen* superum conicum rostris s. stigmatibus brevibus, innuptis conniventibus.

Herbæ perennes : alpinæ, prostratæ, omnino rigidæ foliis minutis sublineari-lanceolatis confertis, in omni specie plus minus ciliato-denticulatis. *Flores* albi concinni.

aspera. C. foliis caulinis lanceolatis alternis ciliatis, cauli-
1. bus procumbentibus.

Sax. aspera. Linn. sp. pl. 575.—*Willd. sp. pl.* 2. 649.—*Pers. syn.* 1. 489.—*Sternb. sax. t.* 8. *f.* 1.

Habitat in Europæ alpibus.

Floret Aug. ♃.

Introd. 1748.

Obs. Caules rubri. *Flores* superi, 3, s. 4, albidi. *Petala* unguiculata ampla obtusa basi imbricantia.

β *brevinoda* (close-jointed), caulium viridiorum nodis triplo magis approximatis: foliis cum surculis caules tegentibus, pallidioribus magis ciliatis: petalis basi distinctis.

Forte propria species.

Communicavit amiciss. Bree.

bryoides. C. foliis lanceolatis mucronatis margine cartilagi-
2. neis ciliatis, caulē nudiusculo paucifloro, calycibus obtusis.

Sax. bryoides. Willd. sp. pl. 2. 643.—*Jacq. misc. nat.* 2. *p.* 49. *t.* 5. *f.* 1.—*Sternb. sax. t.* 8. *f.* 2. —*Scop. carn. No.* 497. *t.* 15.—*Deutsch. fl. cum icone.*

Habitat in alpibus Europæis. ♃.

Introd. 1775.

Folia serrata, basi ciliata, serraturis apice sæpe callosis. *Folia* radicalia in orbem digesta, caulina 5, s. 6, alterna, tenera. *Caulis* pubescens. *Flores* 1, s. pauci; petala flava, maculis fulvis. *Willd. l. c.*

Obs. Siccatam solum vidi. *Caulis* foliis oblongo-lanceolatis alternis 3, 8, munitus. *Germina* magna geminata apicibus erectis grossis stigmate obtuso coronatis.

C.? foliis imbricatis subulatis ciliatis spinosis, caule subnudo multifloro. *bronchialis.* 3.

Sax. bronchialis. Willd. sp. pl. 2. 644.—*Gmel. fl. sib.* 4. *p.* 164. *t.* 65. *f.* 2.

HABITAT in Siberia.

CULT. apud Dom. Jenkin's nursery, A. D. 1819, at sine flore postquam periit. Sed nunc rursum viget cum amiciss. Bree, a seminibus Domino Hunneman (per me) missis.

Stolones oblongi confertim imbricati: foliis planis subulatis, mucronato-spinosis spinoso-ciliatis. Caulis altus nudiusculus: foliis aliquot minimis mucronatis margine lævibus. Panicula parva. *Willd. l. c.*

Seminales plantas solum vidi.

12. ANTIPHYLLA. (Saxifraga *Linn. &c.*)

Calyx patulus segmentis parabolico-ellipticis. *Germen* semiinferum. *Styli* longi grossè subulati, extùs convexi, intùs plani, erecto-approximati in pyramidalem formam, basi albi confluentes, supernè rubri. *Stigmata* inconspicua. *Filamenta* valida planiuscula, erecta, supernè parum attenuata, rubicunda. *Petala* ampla rubicunda, imbricantia.

Herbæ ramis perennantibus, foliolis oppositis (rarissimè alternis) ciliatis carnosulis, apice subindè retusis, (puncto pertuso) fere tectis.

A. foliis confertis ovatis oppositis (subalternisque) staminibus pistillisque corolla brevioribus. *cærulea.* 1. *

Sax. cærulea. Lapeyr. sax. p. 36. *t.* 16.—*Pers. syn.* 1. 488.—*S. oppositifolia. Engl. bot. t.* 9.—*Deutsch. fl. icon. x.* 2.

HABITAT in alpibus, super saxa, prope nives et

gelu. In surculis sterilibus folia alterna etiam vidi. *Pers. l. c.*

Obs. *Flores* siccati cærulescentes.

biflora. 2. * A. (rosea) foliis obovatis, omnibus oppositis distantibus, corollis pistillisque calycem duplo superantibus.

Sax. biflora. Lapeyr. l. c. p. 37. *t.* 18.—*Pers. syn.* 1. 488.—*Allion. pedem. n.* 1530. *t.* 21. *f.* 1.—*Deutsch. fl. cum icone.*

Habitat cum priore.

Flores 1—3, rosei. *Pers. l. c.*

retusa. 3. A. foliis oppositis imbricatis ciliatis cuneato-obovatis apice triangulari-retusis puncto pertuso succulentis.

Sax. retusa. Lapeyr. p. 38. *t.* 18.—*Deutsch. fl. icon. X.* 2.

Sax. purpurea. Allion. pedem. n. 1531. *t.* 21. *f.* 2.

Habitat in Britanniæ montibus variis.

Floret Feb. Mar. ♃.

Hæc species hujus generis solum nobis spontanea viget. Variat paululum in magnitudine foliorum petalorumque. *Flores* semper saturate rubicundi speciosi. *Folia* opposita succulenta supernè ciliis validis apiceque retusis, maximè simulant (lente) folia Mesembryanthemi tigrini ! Singulum etiam gerit punctum præsingulare pertusum !

spathulata. 4. * A. foliis spathulatis obtusis ciliatis, caule prostrato, pedunculis axillaribus unifloris.

Sax. spathulata. Desf. Atlant. 1. *p.* 342. *t.* 96. *f.* 2.—*Pers. syn.* 1. 489.

Habitat in cacum. Atlantis.

Cal. ciliatus. *Cor.* alba obovata. *Pers. l. c.*

β *arctica.* Floribus cæruleo-purpurascentibus. Ex Insula arctica Melville, a Dom. Lt. Hopner collecta et communicata. Forte propria species.

** REFLEXO-CALYCATÆ, laciniis calycinis reflexis, scapis fere aphyllis.

† SESSILIFOLIÆ, corollis regularibus.

13. MICRANTHES. *Nob. in Syn. succ.* 321.—Saxifraga (*Linn. &c.*)

Calyx laciniis 5 arctissimè refractis. *Corolla* 5-petala, petalis remotis loratis exunguiculatis. *Filamenta* uniformia compresso-plana, petalis breviora.

Herbæ perennes. *Folia* radicalia sessilia orbiculatim humi adpressa, (seniora sublorea) lanceolata denticulata viridia, pilis minutis sæpius ciliaribus lente singulariter articulatis. *Flores* glomerato-paniculati præexigui virescentes immunes. *Scapi* fistulosi erecti bipedales.

M. foliis lanceolatis repando-denticulatis venosis, margine subtusque autumno subpubescentibus; pedunculis unifloris aggregatis. *pensylvanica.* 1.

Sax. pensylvanica. Linn. sp. pl. 1. 571.—*Nec Willdenovii neque herb. Linn., quæ foliis gaudet undique hirsutulis.—Dill. elth.* 337. *t.* 253. *f.* 328, *bona.*

HABITAT in Pensylvania.

INTROD. 1732, s. ante, *Dill. l. c.*

FLORET Mai.—Jun. ♃.

M. foliis oblongo-lanceolatis glabris repando-dentatis, caule nudo, pedunculis aggregatis. *Hieracifolia.* 2.

Sax. hieracifolia. *Willd. sp. pl.* 2. 640.
Micranthus semipubescens. *Nob. in Synops. succ.* 321 ?

Obs. In nostra, folia lanceolata, obtusa subavenia crassiuscula, in autumno subindè subtus subpubescentia. Cult. a me 1790.

Habitat in alpibus Carpaticis.

Folia oblongo-lanceolata repando-dentata utrinque glabra, &c. *Pedunculi* 1-flori 4-6 aggregati. *Flores* superiores subsessiles magis conferti, &c. *Willd. l. c.*

hirta. M. foliis lanceolatis hirsutis, floribus subcapitatis.
3. *Sax. hieracifolia.* *Donn. hort. cantab.—Inde ex*
* *ipso accepi.—S. pensylvanica.* *Willd. sp. pl. quoque herb. Linn.*

Habitat in America Boreali.

Floret Mai. Jun. ♃.

Introd. 1769.

Obs. Hæce tres facilè dignoscuntur, prima foliorum venis, ultima hirsutie.

†† Decurrentes, foliis alatim decurrenter petiolatis; petalis 2, inferioribus cæteris plus minus longioribus.

14. AULAXIS. (Saxifraga *Linn. &c.*)

Calyx laciniis 5, refractis. *Corolla* irregularis, petalis 2 inferioribus elongatis divaricantibus, gracilioribus. *Stamina* basi gracillima, supernè angustè lanceolato-linearia. *Capsulæ* superæ altè bipartitæ, basi solùm coalitæ, in rostra acuta subdivaricata progredientes. *Stigmata* ferè nulla. *Semina* lanceolato-elliptica incurva (lente)

subrugulosa sulcata porcatave, porcis moniliformibus.

Herbæ Micranthidis habitu, foliis lanceolatis subduplicatim inciso-denticulatis, supra viridibus, subtus pallidioribus. *Scapi* fistulosi. *Flores* graciliter paniculati parvi albi, rubro minutè punctati.

A. foliis hirtis subduplicatim argute serratis. *Micranthifolia.*
Robertsonia Micranthifolia, foliis alatim petiolatis lanceolato-oblongis obtusis altè dentato-serratis hirtis, petalis macula flava, filamentis pedunculatis, stylis subulatis acutis. *Nobis in Synops. succ. p.* 322.—*Sax. erosa. Pursh Americ.* 311. 1. *

HABITAT in Carolina.
FLORET Mai. copiosè. ♃.
INTROD. Dom. Frazer, et communicavit anno 1810.

A. foliis nudis, altè duplicatim inciso-denticulatis. *nuda.*
HABITAT .... 2.
FLORET Mai. ♃. *
INTROD. ante 1813.
Communicavit Dom. Cowper.

15. SPATULARIA. (Saxifraga *Aliorum.*)

Calycis laciniæ 5 arctissimè refractæ, oblongo-ovatæ concavæ. *Corolla* irregularis alba, *petalis* pedunculatis, 3 superioribus angustè deltoideis, basi maculâ geminatâ flavâ : 2 inferioribus altiùs pedunculatis descendentibus lanceolatis immunibus. *Germen* superum niveum rostris erectis approximatis obtusè acuminatis (denique paululum divergentibus) fere absque pistillo stigmateve. *Stamina* longa filiformia divergentia

deorsum paululum crassiora, petalis breviora. *Antheræ* innuptæ trapeziformi-cordatæ parvæ rubræ (nuptas non examinavi). *Semina* oblonga, medio parum crassiora minuta.

Herbæ Carolinianæ Europeæve perennes; *scapis* fistulosis copiosè ac gracilitèr paniculatis dichotomis hirtis: *foliis* lanceolatis cuneiformibus argutè dentatis hirtis.

* VERÆ: RECTIROSTRATÆ.

leucanthemifolia. 1. S. paniculis divaricato-dichotomis gracilibus, corollis valde irregularibus.

Saxifraga leucanthemifolia, hirsutissima, foliis elongato-spatulatis, acute dentatis, caulibus divaricato-dichotomis, paniculis capillaribus, petalis inæqualibus. Pers. syn. 1. 488.

Habitat in Carolina.

Floret Jul. Oct.

Introd. ante 1812.

Communicavit Dom. Aiton.

Clusii. 2. S. foliis radicalibus oblongis petiolatis dentatis, scapo ramoso, petalis inæqualibus; lobis calycinis nervosis. *Lam. et Decand. syn. p.* 319; *et Fl. fr. tom.* 4. *p.* 1. *fl.* 380. sub Saxifraga.

Habitat in alpinis Pyrenæorum. ♃.

Non vidi (nisi siccam in Herb. amiciss. Bree) neque figuram; at a descriptione, patriaque, veram speciem credo.

** SPURIÆ: CURVIROSTRATÆ.

Corolla regularis stellaris, petalis subpedunculatis deltoideo-ovatis, 2 inferioribus subinde aliquantillum longioribus s. altius pedunculatis s. graci-

lioribus. *Stamina* infernè parum crassiora, *antheris* subminiatis. *Germen* superum stigmatibus inconspicuis. *Capsula* rostris recurvis. *Semina* vix ovata, nempe valde gibba subincurvave (lente) porcata.

Herbæ parvæ europeæ elegantes teneræ sed perennes, fibrosis radicibus; foliis obovato-cuneatis sessilibus, supernè solum dentatis, rosam fere formantibus supra terram: scapis subracemosis paucifloris. Forte genus novum inter Spatulariam et Robertsoniam.

S. pilosula, petalis omnibus basi unipunctatis. *stellaris.* 3.

Saxifraga stellaris. Linn. sp. pl. 1. 572.—*Engl. bot.* 167.

β *comosa. Smith fl. lapp. t.* 2. *f.* 3.

γ *depilata*; foliis lato-cuneatis dentatis nudis nitentibus, petiolis remotè ciliatis, petalis 3 superioribus basi unipunctatis, infimis immunibus.

Sax. stellaris. Deutsch. fl. cum icone, et Schleich. cat. pl. helvet.

Habitat in Helvetiæ alpibus (non in Britannia).

Floret Maio, apud Dom. Jenkins Nursery prope Londinum, et in Horto Chelseiano, orta e seminibus a Schleichero missis, A. D. 1819.

Obs. Sax. stellaris *Engl. bot.* fere duplo major nitidior et sine hirsutie, exceptis petiolis aliquantillum. *Flores* fortè minus æquales, petalis 2 inferioribus solum punctatis. *Folia* cuneato-obovata remotiusculè serrato-dentata basi solùm et remotè ciliato-pilifera. *Scapus* magis floriferus, altiusque hirtulus pilis expansis (lente) pellucentibus roseis apice glandulosis. *Petala* pedunculata, præcipuè 2 inferiora cuneato-ovalia: 3 superiora subovata, maculis 2 rotundatis distinctis contiguis infernè, infra medium

flavis. *Filamenta* nivea erecto-patula antheris innuptis miniato-rubris, obsoletè rhombeo-cordatis. *Germina* acutiora quam in priore, sed matura non vidi, foliolis calycinis obtusioribus oblongo-parabolicis. A semine crescit sine variatione. Forte propria species.

††† SARMENTOSÆ, corollis maximè irregularibus.

16. LIGULARIA. *Duval. pl. succ. in hort. alenç. p.* 11. (Saxifraga *Linn. &c.*)

Calyx laciniis 5, concavis. *Corolla* irregularissima, *petalis* 3, superioribus adscendentibus brevibus; 2, inferioribus ligulatim elongatis dependentibus. *Stamina* filiformia, medio crassiora petalis breviora. *Germen* superum, basi partis superioris glandulâ cerinâ aurantiâ dentatâ, caput galli simulante.

Herbæ perennes teneræ hispidæ, flagellis sarmentosis filiformibus reptantibus. *Folia* longe petiolata rotundata grossè crenata carnosula, supra latè venosa: venis lente argenteis: subtus nitentia, rubescentia, parumque papulosa. *Scapi* graciles plus minus graciliter paniculati.

sarmentosa. L. foliis cordato-orbiculatis carnosulis; petalis valde inæqualibus.

1. *Ligularia sarmentosa. Duval. l. c.*
Sax. sarmentosa. Willd. sp. pl. 2. 646.—*Hort. kew. ed.* 2. 3. 67.—*Curtis magaz.* 92.
HABITAT in China: Japonia.
FLORET Jun. Jul. G. H. ♃.
INTROD. 1771.
Calyx 5-partitus laciniis oblongo-ovatis subre-

flexis concaviusculis. *Corolla* maximè irregularis, 5-petala, petalis æqualiter petiolatis, tribus superioribus cordatis acutis exiguis pallidè roseis, basi macula flavissima, medio punctis 3-4 rubris subquadratim dispositis; petalis 2 inferioribus pendentibus, oblongo-lanceolatis s. ligulæformibus albis, cæteris quadruplo longioribus. *Stamina* divaricata obtusè complanata alba, deorsum apiceque valde attenuata, inde fere lanceolata, semilongitudine petalorum inferiorum. *Antheræ* rotundato-cordatæ unisulcatæ roseæ. *Germen* fere superum retusum perviride (rostris demum divaricantibus) supernè at basi semicinctum glandulâ cerinâ aurantiâ coronæformi, ex ordinibus duobus dentium obtusorum. *Styli* 2 filamenta fere simulantes albi, inferne viridi-flavi, *stigmatibus* parvulis albis.

Obs. Duval descripsit petala omnia ligulæformia. Non sic in nostra planta. Illius petala superiora ut in optima figura Curtisii. Inde variat

α petalis superioribus cordatis. *Bot. mag.* 92.

β petalis 5, ligularibus, duobus longè majoribus irregularibus. *Duval. l. c.*

L. foliis obovato-oblongis carnoso-coriaceis, petalis omnibus ligularibus parum inæqualibus. *minor.* 2.

Habitat . . . .

Floret Oct. G. H. ♃.

Introd. ante 1815.

Communicavit florentem amiciss. Bree, priore quadruplo minorem.

Flores racemosi, vix paniculati, 3-4 in singulo racemo, longe pedunculati minutè bracteolati. *Calyx* 5-fidus laciniis elliptico-oblongis s. ovalibus suberecto-incurvis concavis. *Corolla* 5-pe-

tala, petalis irregularibus, lanceolatim ligulæformibus, parum acuminatis, vel subinde lanceolatis; tribus superioribus brevibus adscendentibus subroseis, basi maculâ subgeminatâ flavâ: duabus inferioribus latioribus duplo plusve majoribus, s. elongatim dependentibus niveis. *Stamina* filiformia, medio parum crassiora, petalis omnibus breviora subpatentia, *antheris* roseis. *Germen* superum fisso-geminatum (rostris elongatis divaricatis) supernè, at basi, glandulâ cerinâ aurantiâ dentatâ, cristam galli simulante. *Stigma* album capitatum. Exempla duo solùm examinavi. An idem cum var. *β*, præcedentis? Vix? At petala omnia ligularia, sæpiusque imperfecta. *Folia* variant, sæpe plus minus rotundata, vel subreniformia, sive basi cordata; crassa obsolete marginata lobato-crenata, undique hispida, supra venis albis (lente argenteo-micantibus) reticulata, subtus præcipue nitida.

†††† Punctifloræ, corollis regularibus foliis altè petiolatis.

17. ROBERTSONIA. *Nob. in Synops. succ. p.* 321. (Saxifraga *Linn. &c.*)

Calyx 5-partitus laciniis arctissimè refractis. *Corolla* 5-petala, petalis unguiculatis. *Filamenta* teretia, basi gracillima, superne valde inerassata, petalorum longitudine. *Germen* superum. *Semina* (lente) echinatim tuberculata, rotunda, fusca.

Herbæ perennes omnino, foliis rotundatis sphæroideis, oblongis, cuneatisve, coriaceo-carnosis, serratis, dentatis, crenatisve, lævibus et nitenti-

bus. *Scapi* solidi absolutè aphylli pedales et ultra, effusè gracilitèr paniculati. *Flores* parvi albi, fere semper lutéo rubrove perlepidè punctulati.

R. foliis reniformi-rotundatis, dentatis crenatisve. *Geum.* FLORET Mai. ♃. 1.
Maximè variat.
α Geum; foliis reniformibus dentatis, caule nudo paniculato. *Linn. sp. pl.* 1. 574.—*Sax. Geum. Engl. bot.* 1561.
HABITAT . . . .
β dentata; foliis reniformibus rotundis crenato-dentatis, petalis sanguineo flavoque punctatis.
Robertsonia dentata. Nob. in Syn. succ. p. 323.
HABITAT in Hiberniæ montibus. Rev. G. T. Bree.
Minus hirta, foliis minus argute dentatis numerosioribus, paulo minoribus, floribus sanguineo flavoque punctatis. *Syn. succ. l. c.*
γ crenata; hirsuta foliis reniformibus rotundis obtusè crenatis.
Robertsonia crenata. Nob. in Syn. succ. p. 323.
Major quam *α*, minus hirsuta, foliis crenatis nec dentatis, floribus sanguineo flavoque perlepide punctatis. *Syn. succ. l. c.*
HABITAT in alpibus. Crescit vulgaris in hortis sine variatione.
INTROD. ante 1790.
δ polita; hirta foliis reniformibus rotundatis argutè dentatis, paginis nudis lævigatis.
Robertsonia polita. Nob. in Syn. succ. p. 322.
HABITAT in Hibernia. Rev. G. T. Bree.
ε gracilis, var. δ similis, at triplo 4-plove minor et omnino gracilior.
Hortulanorum Sax. gracilis.

hirsuta. 2. R. foliis rotundatè subcordato-ovalibus subretusis, subcartilagineo-crenatis dentatisve, nudis rariusve hirtis; petiolis semper hirsutis.

Floret Maio. ♃.

Maxime variat.

α *obliqua;* foliis cum unda obliqua orbiculato-ovatis cordatis crenatis nudis saturatè viridibus.

Sax. hirsuta; foliis cordato-ovalibus retusis cartilagineo-crenatis, caule nudo paniculato. *Linn. sp. pl.* 1. 374.

β *atrovirens;* (deep green) foliis lato-ovalibus, concinnè dentatis atro-viridibus, basi oblique retusis, costa subtus hirsuta.

Communicavit amiciss. Bree, A.D. 1815, nomine Sax. hirsutæ, ex horto apud Liverpool.

γ *lœte virens;* (light apple-green) foliis lato-ovalibus, concinne dentatis pallidè viridibus, basi oblique retusis, costa subtus hirsuta.

Sax. hirsuta. Engl. bot. 2322.

Communicavit amiciss. Bree, ex horto botanico Oxoniensi, nomine *Sax. hirsutæ.*

Habitat in Hiberniæ montibus.

δ *hispida;* foliis suborbiculato-ovalibus concinnè utrinque petiolisque hispidis; basi oblique retusis, subcuneatisve.

Habitat in Hiberniæ montibus, nec Scotiæ, ut olim malè audiveram.

ε *sphæroidea;* foliis subcordato-latè-ovalibus altè-obtusè-crenatis, paginis nudis.

Robertsonia sphæroidea. Nobis in Synops. succ. p. 322.

Prioribus varietatibus duplo minor: *α*, simillima, et forte cum ea propria species.

Habitat in Pyrenæis? Non in Britannia.

R. foliis subrotundis nudis dentatis serratisve, basi plus minus cuneatis. *punctata.*

Floret Maio. ♃. Variat. 3.

α punctata; Sax. punctata: foliis subrotundis dentatis longius petiolatis, caule nudo. *Linn. sp. pl.* 574.

Folia subrotunda dentibus incisa, ut fere lobata absque ora cartilaginea, minime retusa, dentibus acutis. *Petioli* læves triplo longiores, superne sensim dilatati in folium. *Flores* minores quam in S. Geo fere inferi. *Linn. l. c.*

Habitat in Siberia.

β serrata; subhirtula, foliis obovato-cuneatis rigidis argute serratis carnosis, paginis glabris nudis. *Nob. in Syn. succ. p.* 322.

Habitat in Hiberniæ montibus, cum variis subvarietatibus.

Obs. In Hiberniæ montibus, inter se ita variant spontaneè hæce tres præcedentes species, ut limites certissimas nondum inveni.—Fere tantummodo hybridæ omnes, varietatibus sine fine. Sequentes in Hibernia non inveniuntur.

R. foliis obovatis subretusis cuneatisve, cartilagineo-crenatis. *umbrosa.* 4.

Floret Maio. ♃.

Variat minus quam præcedentes.

α longipes; foliis obovatis subretusis cartilagineo-crenatis pedunculis longis ciliato-villosis.

Sax. umbrosa. Linn. sp. pl. 1. 574.

Habitat in montibus apud Cantabros. *Linn. l. c.* Non in Britannia.

Affinis nimium S. Geo. *Folia* basi minime cordata, crenis angulatis, petiolis ciliato-villosis. *Linn. l. c.*

β brevipes; minor, petiolis abbreviatis florendi tempore foliorum paginis absconditis.

Habitat in Anglia, prope Hessleton Gill in *Com. Ebor.* ubi invenit spontaneam, et vix spontaneam, amiciss. Bree.

Sax. umbrosa. *Engl. bot.* 663.—Varietas insignis.

cuneifolia. 5. R. foliis cuneiformibus obtusissimis repandis, paginis petiolisque nudis.

Sax. cuneifolia. *Linn. sp. pl.* 1. 574.—*Scop. carn. n.* 490. *t.* 15.—*Willd. sp. pl.* 2. 647.—*Deutsch. fl. cum icone.*

Habitat in alpibus Styriæ.

Floret Maio. ♃.

Introd. 1768.

Simillima præcedenti, sed foliorum margo non crenatus, at obtusissime repandus, folia longe minora. Flores inferi. *Linn. l. c.*

Obs. Petala basi punctum solitarium luteum.

daurica. 6. * R. foliis cuneiformibus truncato-retusis crassis nudis coriaceis, apice dentatis, scapo pubescente.

Sax. daurica. *Willd. sp. pl.* 2. 645.—*Pers. syn.* 1. 488.—*Sax. punctata.* *Pallas itin.* 3. *app. n.* 91. *t.* P. *f.* 2.

Habitat in summis alpibus sub nive. ♃. *Willd. l. c.*

Nimis affinis Sax. cuneifoliæ *Linn.?*

Obs. Priore duplo major; foliis crassioribus, margine magis cartilagineo-albo; petalis basin versus luteo quadripunctatis. Ob patriam propria species. Exempla duo (ab amiciss. Bree) solum vidi, unum siccatum, alterum petalis fere omnino delapsis. An corolla exactè regularis?

2. *BIVALVES*, capsulis uniloculabus, bivalvibus.

18. MITELLA. *Linn. &c.*

Fructus superus, capsula 2-valvis, valvis æqualibus. *Calyx* 5-fidus, persistens. *Petala* 5, laciniata aut pinnatifida. *Stamina* 10.
Herbæ humiles radice perenni, folia simplicia basi cordata, viridia. *Ex Juss. &c.*

M. foliis cordatis subtrilobis, scapo diphyllo, foliis oppositis argute serratis. *Willd. sp. pl.* 2. 659. —*Bot. regist.* 166. *diphylla.* 1.
HABITAT in America septentrionali.
FLORET Apr.—Mai. ♃.
INTROD. 1751.
β *triphylla*; scapo triphyllo, foliis alternis subtrilobis crenato-dentatis, crenis acuminulatis.

M. foliis cordatis ciliato-dentatis, scapo nudo. *Pers. syn.* 1. 491. *cordifolia.* 2. *
HABITAT in Canada, circa Quebec. ♃.
Non vidi.

M. foliis rotundato-cordatis, caulibus prostratis foliosis. *prostrata.* 3. *
HABITAT in Canada meridionali. Sublobata. *Pers. syn.* 1. 491.
Non vidi. ♃.

M. hirsutissima; foliis rotundato-cordatis obtusè lobatis dentatis, scapo folio uno alterove instructo, floribus pedicellatis, calycibus campanulatis. *Pursh americ.* 314. *grandiflora.* 4.
HABITAT in America boreali-occident.
Flores cæteris quadruplo majores. *Pursh.*

nuda. M. foliis reniformibus repandis ciliatis; scapo nudo. *Willd. sp. pl.* 2. 660.—*Ait. hort. kew. ed.* 2. *v.* 3. *p.* 73.
5.
Mitella scapo nudo, corollarum petalis fimbriatis. Gmel. sib. 4. *p.* 175. *t.* 63. *f.* 2.
Mitella prostrata. Pursh americ. 314.
Habitat in Asia, et Americ. boreal.
Floret Jun. Aug. ♃.
Introd. ante 1758.
Caules filiformes ramosi prostrati reptantes.

19. TIARELLA. *Linn. &c.*

Fructus superus, *capsula* 1-locularis bivalvis, valvulâ alterâ majore. *Calyx* 5-fidus persistens. *Petala* 5 integra. *Stamina* 10.
Herbæ perennes; folia sæpius radicalia simplicia s. ternata, flores in scapo nudo, aut alternè 2-phyllo, laxe spicati terminales. *Ex Juss. &c.*

cordifolia. T. foliis cordatis. *Willd. sp. pl.* 2. 659.—*Pers. syn.* 1. 491.
1. *Cortusa americana, flore spicato petalis integris. Herman. parad.* 129.
Habitat in America, Asiaque septentrionali.
Floret Ap. Mai. ♃.
Introd. 1759.

Menziesii. T. foliis ovatis cordatis acutis brevi-lobatis dentatis, caulinis alternis distantibus, racemo filiformi
2. subspicato, calycibus tubulosis. *Pursh americ.* 313.
Habitat in America boreali-occident. ♃.

trifoliata. T. foliis ternatis. *Willd. sp. pl.* 2. 659.—*Pers. syn.* 1. 491.—*Miller's dic. No.* 2.
3. Habitat in Asia boreali.
*

FLORET Maio. ♃.
INTROD. ante 1768, a Philippo Millero.

T. foliis biternatis, foliolis ovatis cordatis obliquis inciso-lobatis dentatis, caule folioso, panicula terminali divaricato-spiciflora. *Pursh americ.* 313. *biternata.* 4.
HABITAT in Carolinæ montibus.

II. OCTANDRÆ.

20. CHRYSOSPLENIUM. *Linn. &c.*

Calyx superus 4-5-fidus, inæqualis persistens, viridi-aureus uti floralia folia. *Petala* 0. *Stamina* 8-10, brevia, antheris saturatè aureis. *Germen* inferum desinens in stylos 2 altitudine filamentorum; stigmatibus inconspicuis. *Capsula* birostris, 1-locularis bivalvis polysperma.
Herbæ palustres exiguæ sempervirentes radice repente. Folia rotundo-reniformia carnosula crenata, opposita vel alterna. *Flores* dichotomi parvi sessiles, simulantes eos Ribis rubræ; plurimi terminales foliis floralibus magnis aureo plus minus coloratis cincti; 4-fidi, et 8-andri, omnes, excepto rarius primario 5-fido, 10-andro. *Ex Juss. &c.*

C. foliis caulinis alternis. *Linn. sp. pl.* 569.—*Engl. bot. t.* 54.—*Fl. dan.* 366.—*Deutsch. fl. cum icone.* *alternifolium.* 1.

Habitat in Anglia ad opacos margines rivulorum at rarius.

Floret Ap. ♃.

oppositifolium. 2. C. foliis caulinis oppositis. *Linn. sp. pl.* 569.—*Engl. bot. t.* 490.—*Fl. dan. t.* 365.—*Deutsch. fl. cum icone.*

Habitat cum præcedente, at frequentius.

Floret Ap. ♃.

β *minus*; foliis confertioribus, floralibus viridioribus, altiusque crenatis.

Communicavit amicus Dom. R. A. Salisbury.

21. ADOXA. *Linn. &c.* Moschatellina *Tourn.*

Calyx superus 4-5-fidus, basi extus 2-squamosus, squamis persistentibus. *Petala* 0. *Stamina* 8-10, *antheris* subrotundis. *Germen* inferum; styli 4-5 persistentes; stigmata 4-5. *Bacca* globosa umbilicata, 4-5-locularis loculis 1-spermis.

Herba folia biternata radicalia; *scapus* medio oppositè 2-phyllus, apice sæpius 5-florus, floribus capitatis, lateralibus 5-fidis, 10-andris, 5-stylis, 5-spermis, supremo 4-fido, 8-andro, 4-stylo, 4-spermo. Habitus Panacis trifoliæ. *Juss. gen. pl.* 343.

Moschatellina. 1. A. *Linn. sp. pl.* 527.—*Curt. fl. lond.* 2. *t.* 26.—*Engl. bot. t.* 453.

Habitat in Angliæ nemoribus, rarius.

Floret .... ♃.

Radix squamoso-tuberosa. *Folia* annua viridia tenera fugacia. *Flores* inconspicui virescentes odorati.

III. PENTANDRÆ.

22. HEUCHERA. *Linn. &c.*

Fructus superus. *Calyx* 5-fidus. *Petala* 5 parva. *Stamina* 5. *Capsula* 2-locularis.

Herbæ perennes, folia basi cordata lobata, dentata, plus minus villosa. *Ex Juss. &c.*

H. viscoso-pubescens, scapis subnudis, thyrso elongato, foliis radicalibus longe petiolatis septemlobatis. *Pers. syn.* 1. 290.—*H. viscida. Pursh am.* 187.—*Cortusa americana, floribus herbidis. Herm. parad.* 130. *t.* 130.—*H. viscida. Pursh americ.* 187. *americana.* 1.

Habitat in America boreali.

Floret Mai.—Jun. ♃.

Introd. 1704.

H. minor villosissima, foliis acute lobatis, paniculis capillaribus, laxiflora. *Michaux americ.* 1. *p.* 172.—*Pers. syn.* 1. 290.—*H. villosa. Pursh americ.* 188. *villosa.* 2.

Habitat in Carolina infer. montibus.

Flores parvi albi.

Floret Jun. ♃.

Introd. ante 1800.

E horto Dubritense communicavit Dom. Underwood, per amiciss. Bree.

H. (great flowered) pulverulento-pubescens; scapo inferne foliisque subtus glabris, foliis subacuto-lobatis dentatis: dentibus rotundatis mucronatis, pedunculis paniculæ brevibus confertifloris *pubescens.* 3.

calycibus campanulatis majoribus, petalis spathulatis calyce longioribus, staminibus vix exertis. *Pursh americ.* 187.

Habitat in Pensylvania, Virginiæ montibus cæruleis. ♃.

Flores omnium majores.

hispida. 4. H. hispida, scabra; scapo petiolis foliisque subtus glabris, foliis acute lobatis, supra hispido-pilosis dentatis: dentibus brevissimis subretusis mucronatis, pedunculis paniculæ paucifloris, calycibus mediocribus subacutis, petalis spathulatis longitudine calycis, staminibus exertis. *Pursh americ.* 188.

Habitat in Virginiæ et Carolinæ montibus altissimis. ♃.

caulescens. 5. H. basi suffruticosa; scapo basi petiolisque pilosis, foliis supra glabris subtus ad nervos pilosis acute lobatis ciliatis dentatis; dentibus acutis mucronatis, calycibus brevibus villosis, petalis linearibus calyce duplo longioribus, staminibus exertis. *Pursh americ.* 188.

Habitat in montibus Carolinæ.

Introd. ante 1816.

Floret cum cæteris. ♃.

dichotoma. 6. H. caule dichotomo, pedunculis bifloris foliis oppositis axillaribus. *Juss. gen. pl.* 342; in generico charactere solum notata.

* Habitat ....

Non vidi.

REVISIONES
PLANTARUM SUCCULENTARUM.

AUTORE

A. H. HAWORTH,

LINN. SOC. LONDINI SOCIO, ETC.

Multum adhuc restat, multumque restabit.

LONDINI

IN ÆDIBUS R. ET A. TAYLOR.

MDCCCXXI.

PREFACE.

Since the completion of the *Synopsis Plantarum Succulentarum*, the procession of time, and the consequent progress of our knowledge concerning the difficult plants which it is the peculiar business of that publication to explain, have advanced with steady and successful steps. And the Author's unwearied friends, and increasing opportunities, have enabled him to accumulate, digest and arrange, in Linnæan Classes, the materials contained in the subsequent pages; which he humbly trusts will be found acceptable to the admirers of Succulent Plants, and not unuseful to Botanists at large: not merely on account of the new species those pages propose, describe, and teach how to incorporate with the ancient stock; but especially by

more valuable matter, relating to the corrections of unavoidable errors concerning the old species. For, it is far less easy to unlearn, than it is to acquire new information: and because unaltered and accumulating errors, like increasing spots upon the solar disk, obscure the brightness of our ever-pleasing science,—

"Nitorem scientiæ polluunt."

SUCCULENTARUM REVISIONES.

DIANDRIA. Trigynia.

PIPER. *Linn.* &c.

P. (Pereskia-leaved) foliis ter-quaternisque oblon- *Peres-*
gis trinerviis glabris coriaceis, spicis terminali- *kiæfo-*
bus solitariis. *Rœm. et Schultz. syst. veg.* 328. *lium.*
—*Jacq. ic.* 2. *t.* 212. 1.

Obs. P. tricarinato nobis simillimum, at minus omnino: nervis minus vel vix prominentibus nec carinæformibus. St. ♄.

Amicus Parmentier, ordinis Belgici Leonis Eques, &c. in hort. Chels. introduxit A. D. 1820, cum sequente.

P. (small, villose, red-leaved) toto villosum: foliis *rubel-*
quaternis subrotundo-obovatis subtus convexu- *lum.*
lis rufis lenticuliformibus. 2.

Habitat in Jamaica. St. ♄. *

Viget in hort. Chels. Affine P. verticillato, potiusve P. pallenti; a priore differt, colore rubro, &c.—a P. pallente, foliis quaternis, nec ternis. Simulat quoque P. pulchellum in habitu et magnitudine, sed foliorum forma discrepat, atque magis et valde villosum. Folia, præcipue subtus, ad lucem trinervia.

PENTANDRIA. DIGYNIA.

CEROPEGIA. *Linn.—Synops. succ.* 13.

dichotoma. 1. C. (forked.) *Synops. succ. l. c.*
Flores laterales pauci. *Pedunculi* 1-2-lineares crassi, supernè paululum crassiores. *Calyx* 5-phyllus exiguus, foliolis parabolico-lanceolatis. *Corolla* 1-petala uncialis plusve, tubulosa sordidè lutea, 5-fida, laciniis parum patulis semiuncialibus lineari-lanceolatis, demum ad latera plus minus deflexis. *Genitalia* exigua in fundo corollæ viridi-lutescentia. *Ligulæ* 5 ovato-acutæ dorso inflexo-canaliculatæ (ad lentem) corniculis erectis undulato-subinvolutis vermiculæformibus, staminibus quadruplo brevioribus. *Antheræ* geminatæ luteæ punctulo parvo interjecto.
Cætera non examinavi, et unum florem solùm.

HOYA, *Brown in Hort. kew. &c.*

acuta. 1. H. (acute-leaved) foliis ovato-lanceolatis, acuminatis.
* HABITAT .... St. ♄.
Simillima Hoyæ carnosæ, at foliis minoribus magisque acuminatis. Vidi crescentem sine floribus in regio horto Kewense, A.D. 1819.

PENTANDRIA. TRIGYNIA.

PHARNACEUM. *Linn. gen. pl. Schreb.* 517.

pruinosum. 1. * P. (mealy) *Suppl. pl. succ. p.* 15.
Flores vidi apud Kew, Jun. 1, 1819. *Pedunculi* communes, terminales sub 7-unciales graciles

teretes, punctis numerosis nigris scabris, uti partiales calycesque : *partiales* unciales erecti, at post, necnon ante anthesin deflexi, instar Pelargonii ; basi quasi geniculati glabri multi-spathaceo-involucrati, spathis membranaceis, cordato-abruptè acuminatis, pedicellos amplectentibus. *Calyx* 2-phyllus foliolis reflexis oblongo-ovatis viridibus ad oras rubicundis. *Petala* 3, orbiculato-cochleata rosea, delicatissima, extus infernè costato-calycina. *Filamenta* calyci inserta, hypogyna sub 14-16 alba patentia, petalis parum breviora. *Germen* superum ovale. *Styli* 5 radianter expansi breves luteo-virides.

PENTANDRIA. Pentagynia.

LAROCHEA. *Pl. grass.* Crassula *Linn.&c.*

Obs. *Corolla* infundibuliformis, tubo brevi limbum subæquante. *Folia* involucracea nulla. *Flores* corymbosi terminales. *Suffrutices* conspicui succulenti erecti simplices demum lignosi, foliis decussatis perfoliatis magnis integris crassis carnosis canis.

L. (great-falcated.)
Rochea falcata. Pl. gr. 103.—*Crassula falcata. falcata. Bot. magaz.* 2035. 1.
β minor (lesser falcated) ; omnino minor.
Communicaverunt illust. Princeps de Salm Dyck, et amici Van Marum, et Parmentier, Equites, A. D. 1821. Fortasse propria species. Exemplaria parva solum vidi.

perfoliata. 2. L. (Great scarlet perfoliate.) *Crassula perfoliata. Linn. &c.—Pl. gr.* 13.—*Dill. elth. f.* 113.—*Com. præl. t.* 23.

β *alba* (great white perfoliate). *Nobis in Synops. succ.* 51.

KALOSANTHES. Crassula *Linn. &c.*

Inflorescentia involucratim subcapitata. *Corolla* 5-fida, infundibuliformis, laciniis tubo 3-plo brevioribus. Cætera, Larocheæ.

Suffrutices formosi humiles succulenti, foliis lorato-lanceolatis cartilagineo-ciliatis decussatis lævibus, nudis viridibus. *Flores* speciosi jasminei, lutei, albi, coccineive, s. versicolores.

Obs. Suffrutices succulenti, foliis decussatim imbricatis crebrè cartilagineo-ciliatis, viridibus, et plus minus lorato-lanceolatis; floribus capitatim umbellatis numerosis confertis, sæpius albis; coccineisve. Patria semper C. B. S.

jasminea. 1. K. (Jasmine-flowered) caule 3-4 unciali ramulis decumbentibus brevibus; foliis lorato-lanceolatis; floribus capitatim umbellatis.

* *K. jasminea. Nob. in MSS. et Cr. obtusa Nob. in Suppl. succ.* 16.—*Crassula jasminea. Bot. magaz.* 2178.

Floret æstate. G. H. ♄.

Obs. *Flores* subnumerosi terminales ut in affinibus, candidissimi, concinnique, Jasmini flores omnino simulantes, at sine odore suavi per diem. An per noctem?

Obs. This is the C. obtusa of *Suppl. succ.*, which on producing its Jasmine-like flowers, received its present more expressive name.

K. (cymose) calycibus foliolis longis acutis; floribus pedunculatis. *cymosa.* 3.
Larochea? cymosa. Nob. in Syn. succ. p. 50. *et Willd. sp. pl.* 2. 1548. *Vix Linn.*

K. (sweet-scented) floribus capitatis sessilibus concoloribus flavescentibus. *odoratissima.* 4.
Crassula odoratissima. Kenned. in Bot. rep. t. 26.
Larochea? odoratissima. Nobis in Synops. succ. p. 51.

K. (two-coloured) floribus capitatis sessilibus flavescentibus, coccineisque. *bicolor.* 5.
Obs. Priori simillima, at major, forteque rigidior, foliis acutioribus. *
Vigebat in variis hortis, atque æstate sæpius floret. G. H. e C. B. S. ♄.

K. (changeable) foliis lanceolato-amplexicaulibus, floribus capitatis sessilibus variabilibus. *versicolor.* 6.
Crassula versicolor. Bot. reg. t. 320.—*Pluk. mant.* 314. *f.* 3.

K. (great changeable) foliis oblongo-lanceolatis amplexicaulibus, floribus variabilibus. *media.* 7.
Obs. This plant was raised from Cape seeds, and communicated to the author by his kind and generous friend Mr. J. Hooker, late of Norwich, now of Glasgow, an extensive collector and excellent cultivator of succulent plants. Its flowers are said to be variable, like those of versicolor; between which, indeed, and the following species, it seems exactly intermediate. But they are probably all distinct species; or such as, if unallowed to pass, would require the sinking to varieties of almost half the species on record. *

coccinea. 8. K. (long-tubed scarlet) foliis cordato-ovatis amplexicaulibus, floribus sessilibus concoloribus.
Crassula coccinea. Bot. mag. t. 495.—*Decandolle pl. gr. t.* 1.
β alba. Brad. succ. t. 50.
Obs. The above are all the species the author has seen in flower, which will arrange under this genus. But other species will still hereafter recede from the large genus Crassula, forming future genera.

CURTOGYNE. Crassula *Linn. &c.*

Germina 5 tereti-oblonga, apice gibbosa, per stylos longos finientia, et quasi externè lateraliter continuosa. *Inflorescentia* umbellato-cymosa. Cætera *Crassulæ*; foliis imbricatim decussatis ligulatis undulatis, cartilagineo minutissimè ciliatis.—*Suffrutices* vix pedales succulenti ramosi e C. B. S.

undata. 1. C. (greater waved) foliis oblongo s. linguiformi ovatis expansis, summis undatis.
* *Crassula undata. Nob. in Suppl. pl. succ.* 19.
Florebat in regio horto Kewense, Aug. 1821.
Flores fere ut in C. undulata, at duplo majores, dense cymosi. *Corolla* 5-petala campanulata, *petalis* lanceolatis albis, basi læviter connatis, apicibus recurvis revolutisve, et in lente optimo minimè serrulatis. *Stamina* epigyna longitudine corollæ et ejus basi adnata erecto-incurvantia (post anthesin solum vidi) *antheris* nuptatis fuscis. *Germina* 5, valdè singularia, viridia, medio apiceve potiùs, intùs gibbosa, ut in charactere generico, stylis continuosis germinum longitudine, antherarumque altitudine, stigma-

tibus capitulatis fuscis. *Glandulæ* ordinariæ basi germinum brevissimæ truncatæ.

C. (lesser waved) foliis connatis ovatis expansis cartilagineo-crenatis, summis ovato-ellipticis undulato-incurvis: caule dichotomo suffruticoso. *undulata.* 2. *

Crassula undulata. Nob. in Syn. succ. 53.

CRASSULA. *Linn. &c.*

Inflorescentia cymosa. *Corolla* 5-petaloidea, expansa, laciniis basi ipsæ, solum coalitis. *Germina* 5 cum stylis continuantibus subulata.

Suffrutices s. herbæ succulentæ, e C. B. S. præcipue; foliis (paucis exceptis) decussatis, corollis albis roseis, luteisve.

* Anacampseroideæ, habitu fere Sedi Telephii *Linn.* foliis planis latioribus macris, margine glanduloso-serratis.

C. (Orpine-like) caulibus erectis; foliis obovato-oblongis, amplexicaulibus minutim infernè punctato-crenulatis: floribus parvis cymosis. *Telephioides.* 1. *

Viget in regio horto Kewense e C. B. S.

Floret Julio.

Herbacea? *Folia* remota 3 unc. longa, 18 lineas lata, viridia, concavo-planata, apicè parum recurva, lævia nuda impunctata, sed margine ipso subtus ordine punctorum s. glandularum impressarum vix conspicuarum. *Caules* pedales teretes herbacei purpureo crebrè et confluentèr lineolati, crassitie coracis calami, bracteis remotis decussatis foliiformibus at sensim sensimque

minoribus et internodiis brevioribus. *Florum* cyma bifida-trifida. *Bracteæ* intra cymam minutæ oblongæ s. lineolares, supremæ appressæ fere ad confertos breves pedunculos apice rubræ. *Calyx* foliolis 5, oblongis convexo-concavis sæpe viridi subrufescentibus erectis, apice saturatioribus. *Corolla* campanulata (non magis apertam vidi) 5-petala, petalis lanceolato-oblongis convexo-concavis pallide roseis, 2 lineas longis, apice ipso, mucrone obtuso spurio carinulatis. *Filamenta* 5, alba erecta corolla breviora, *antheris* majusculis oblongis erectis rufescentibus, utrinque sulcatis. *Pollen* non vidi. *Germina* 5, angustè ampullacea, alba intus plana, *stylis* roseis corollæ altitudine finientia, *stigmatibus* fere nullis. *Squamula* ordinaria minuta, quadrata, retusa viridis.

Obs. Plantam gracilem Sedi Telephii *Linn.* habitu parum simulat. Locus prope Crass. crenulatam *Linn. supp. p.* 189. Forteque prope Anacampserotam, *Burm. dec. t.* 24. *f.* 2, at in figura flores magis aperti.

Hæ tres fortasse parum approximant ad Globuleam cultratam Nob., sed Crassulæ sectionem novam constituunt.

** Serrulatæ foliis lorato-acuminatis margine cartilagineo-serrulatis.

corymbulosa. 2. C. (corymbulose.) *Hort. berolin.* Morientem ramulum 3-entalem sub hoc nomine accepi ab illustriss. Princ. de Salm Dyck A. D. 1821. Habet folia numerosa decussatim imbricata opposita lorato-linearia 2 uncias longa. An affinis Crass. cymosæ *Willd.?* Nescio flores.

C. (yellow-flowered rough) foliis lorato-lanceolatis, cauleque bullulis albidis minute exasperatis: floribus cymosis luteis. Cotyledon africana, &c. *Martyn. cent.* 24, *cum icone.* — *bullulata.* 3. *

HABITAT C. B. S. G. H. ♄.
Vidi in *Horto Cantabrigiense*, circa annum 1800.

*** SQUAMULOSÆ, foliis lineari-lanceolatis, ramulisque papuloso-squamulosis asperis.

C. (great recurving-leaved, scaly) foliis lineari-lanceolatis acuminatis revoluto-recurvis cauleque squamuloso-asperis. — *scabra.* 4.

Crassula scabra. Linn. sp. pl. 405, excluso synonymo Martyni.—*Crassula Mesembryanthemi facie &c. Dill. elth. f.* 117.—*Ait. kew. ed.* 1. *p.* 395.

C. (patent-leaved, scaly) foliis lineari-lanceolatis acuminatis expansis caulibusque squamuloso-asperis. — *scabrella.* 5. *

OBS. Fere exactè intermedia inter præcedentem et sequentem, sed vix varietas. Priore 2-3-plo minor, sequente 2-3-plo major, et magis aspera. In lente in his tribus caules foliaque tecti squamulis pallidis valde adpressis respicientibus, marginalibus squamulis majoribus. *Folia* ad solem, papuloso-nitentia.

C. (small scaly) foliis lanceolatis cauleque papuloso-squamulosis, floribus capitatis. *Willd. enum. suppl. p.* 15.—*Nob. in suppl. pl. succ. p.* 17. — *squamulosa.* 6.

OBS. Hæce tres præcedentes, et fortasse C. bullulata supra, sectionem novam constituunt.

**** GLOMERATÆ, floribus minutis glomeratis.

glabra. 7. * C. (smooth clustered). *Nob. in Syn. succ.* 58.
C. glomerata β. Ait. kew. 392.
OBS. Caules glabri, lentis ope subpuberuli. *Folia* sæpe ad apicem pilo uno alterove brevi instructa. *Flores* 5-petaloideæ. *Petala* remota parabolica acuta nudo oculo vix conspicua alba. *Antheræ* lutéæ. *Styli* albi erecti.

***** ALTERNIFOLIÆ, radicibus annuis: exiguæ.

pulchella. 8. C. (pretty) caule herbaceo dichotomo, foliis ovato-oblongis carnosis reflexis; floribus in dichotomiis pedunculatis; pedunculis turbinatis.
Crassula pulchella. Hort. kew. ed. 1. *v.* 1. *p.* 392. —*In editione* 2 *omissa, nescio quare.*
HABITAT C. B. S.
INTROD. 1778.
FLORET Jul. G. H. ⊙. *Hort. kew. l. c.*
OBS. In horto Chelseiano florebat Maio 1819. Sedo simile. Radix ⊙. *Caulis* 3-6-uncialis grossus teres ramosus supernè sensim crassior. *Folia* alterna carnosa spatulato-oblonga viridia, seniora sæpe subreflexa 3-6 lineas longa, 1-3 lineas lata.
In plantis maximis, *rami inferiores* simplices semierecti; *superiores* dichotomi: omnes paucifoliati. *Flores* in caulium dichotomiis lutei, et in ramis cymosi: inferiores pedetentim remotiores, *pedunculis* fere nullis, grossève turbiniformibus, subinde ebracteatis, vel cum bractea foliiformi. *Calyx* 5-phyllus foliolis omnino foliiformibus patulis, basi distantibus; horum 2,

cæteris minoribus, Mesembryanthemorum modo. *Petala* 5 distantia ovata acuta parum concava suberectiuscula, calyce vix longiora. *Stamina*, filamenta 5, erecta germinibus adpressa, viridia, *antheris* luteis, stigmatum altitudine. *Germina* 5, viridia incurvatim collecta, stylis stigmatibusque nullis inconspicuisve. *Glandula* ordinaria, in lente obtusa pallida, ad basin singuli germinis eoque adpressa.

Huc referenda *C. rubra*, et forte cæteræ alternifoliæ.

****** Rosulares; scapigeræ: foliis ambienter in rosulam densam depressam imbricatis.

C. (great starry) foliis radicalibus multifariis imbricatim depressis in orbem, ligulatis viridibus minutè ciliatis. *rosularis.* 9. *

Vigebat in regio horto Kewense, e C. B. S. A.D. 1819. Sequente triplo major, et adhuc sine ramo, seu sobolibus.

Floret Jul. 1821.

Scapus nudus 6-uncialis dense corymboso-paniculatus, floribus parvis conglomeratis in singulo ramo paniculæ; ramulis bracteâ exiguâ foliiformi suffultis. *Corolla* 5-petala, petalis oblongo-obovatis albis, basi imbricantibus. *Calycis* foliola 5-6, ovalia lente albo-ciliata convexo-concava. *Stamina*, filamenta 5-6, alba, *antheris* erectis luteis, et per sulcum perpendicularem quasi bilobis, utrinque emarginatis, *polline* luteo. *Germina* 5-6, ampullacea alba, stylis brevibus albis parum patulis, finientia, *stigmate* parvo orbiculari saturatiore. Inter singulum filamentum *glandula* ordinaris subcuneata re-

tusa lutea, antheram monstrosam s. suppressam facillime simulans.

orbicularis. 10. C. (sarmentose, starry.) *Willd. sp. pl.* 1. 1563.— *Pl. grass. cum icone.*—*C. orbicularis* repens foliis Sempervivi. *Dill. elth. f.* 118.

Obs. Corolla virescens, apice rosea, petalis basi distinctis stigmatibus purpureis.

Priori simillima, at distinguitur statura minore sarmentisque.

TURGOSEA. Crassula *Thunb.*

Inflorescentia spicato-thyrsoidea, foliose pedetentim bracteata turritiformis. *Corolla* 5-petala, petalis basi ipsa (per lentem) leviter imbricantibus, infra apicem mucronulatis. *Germinis* squamulæ emarginatæ.

Herbæ biennes succulentæ pilosulæ e C. B. S. foliis decussatis planis punctatis, subtus convexis: floribus minutis fasciculatis roseis, in axillis foliorum sensim sensimque minorum thyrsi terminalis.

* Linguæfoliæ; sive foliis loriformibus subacutis crassis.

linguæfolia. 1. * T. (hoary tongue-leaved.)
Crassula linguæfolia. Nob. in Syn. succ. 56.
Forte sequentis varietas. Vix?

tomentosa. 2. T. (tomentose tongue-leaved.)
Crassula tomentosa. Thunb. prod. p. 56.

pertusa. 3. * T. (impress-dotted tongue-leaved) foliis lorato-acuminatis, exasperatim ciliatis impresso-punc-

tatis viridibus: scapis altè bracteolatis puberulis.

FLOREBAT in hort. Chels. Nov. 1820. G. H. ♃, or ♄.

HABITUS fere Globuleæ, cum Larocheæ inflorescentiâ ?

Folia radicalia decussatim imbricantia semipedalia, lorato-lanceolata plana: superiora sive bracteacea, lorato-subulata, subtus convexa: omnia ad lentem punctis numerosis sparsis impressis, untrinque, at forte majoribus in foliorum pagina superiore. Cilia (lente) cartilaginea alba obtusa creberrima. *Scapus* flexuosus pallidior, bracteis omnino foliiformibus (8 in meo exemplari) per paria decussatis distantibus, sensim minoribus; supremis pedunculos non superantibus, et solum florigeris. *Flores* subverticillato-capitati terminales, breviter pedicellati. *Corolla* infundibuliformis nivea 5-partita fere ad basin, at laciniis oblongis conniventibus deorsum rectisque, et tubum formantibus; supernè horizontaliter expansis obtusis. *Filamenta* 5, alba, tubum superantia, *antheris* brevibus, *polline* sulphureo. *Germen* (in lente) viride. *Squamulæ* 5 ad basin corollæ laciniarum, lato-obcordatæ luteæ.

OBS. *Calyx* 5-phyllus exiguus, foliolis lineari-oblongis corolla 3-plo brevioribus eique adpressis.

OBS. I believe this extraordinary plant to be no other than the Aloë africana glabra folio minutissimis cavitatibus notato of *Com. præl. t.* 29; and (on the authority solely of that figure) my heretofore ambiguous Aloë pertusa! Vide *Linn. soc. lond. trans. v. 7. p.* 25.

** SUBOVATÆ; foliis plus minus obovatis, ovatis, ovatove-lanceolatis, ciliatis.

obovata. T. (obovate-leaved, hispid.)
4. *Crassula obovata. Nob. in Suppl. pl. succ.* 18.
* OBS. Floret in regio horto Kewense fere ut in sequente. In ambabus radix biennis. *Folia* oppositè decussata subsesquiuncialia, ciliis brevibus albis respicientibus, viridia et subinde subtus plus minus purpurascentia, punctis pauculis sparsis minutis obsoletis, et lentis ope, quasi impressis. *Caules* potiusve scapi spicato-thyrsoidei hispiduli. Habitus florendique modus iidem sunt in hac specie, quoque in sequente, et (sed densius) in Crassula turrita *Jacq.* &c.

Aloïdes. T. (ovate-hispid) foliis punctatis spatulato-lanceo-
5. latis ovatisve ciliatis, infernè parcè, caulibusque retrorsum hispidis: floribus axillaribus capitulatis spicato-thyrsoideis: thyrso agaviformi.
Crassula Aloïdes. Ait. kew. 394.
HABITAT C. B. S. G. H. ♂.
FLORET Jul.
OBS. In caldario (vix in aëre aperto) caules floriferi variè decumbentes semipedales valde foliosi hispidi. *Folia* adscendentia subspathulata sescuncialia decussatim densius imbricantia, basi connata vix vere perfoliata, viridia, apicibus rufis plus minusve rufescentibus, præcipue in aëre aperto; ciliis crebris subcartilagineis albicantibus. *Flores* subglomerati in axillis foliorum supremorum sensim sensimque minorum subbracteaceorum, cymam densam trifidam in singula axilla formantes. *Cymarum* ramuli etiam brac-

teolati, bracteolis foliiformibus minoribus et per lentem ciliatis. *Calyx* 5-phyllus, foliolis lineari-lanceolatis erectis rubris bracteolâque rubrâ minore subinde suffultus. *Corolla* angustè campanulata parva 5-petala alba, petalis spathulatis erectis cochleatim convexo-concavis, basi, et sæpe ad latera, imbricantibus, costâ roseâ ; et distinctè mucronulatis infra apicem acutam incurvantem, calycem vix vel parum superantibus. *Stamina* 5 alba erecta, *antheris* polliniferis luteis flore brevioribus. *Squamulæ* germinis emarginatim lunulæformes, virescentes. *Germina* 5 angustè ampullæformia, intus complanata, *stylis* erectis collectis parvis albis finientia, antherarum altitudine stigmatibus inconspicuis.

A Crassula *punctata* differt caule foliisque hispidis, et radice bienni : et discrepat a C. obovata supra, in statura minore et foliorum formâ.

Huc etiam referendæ C. turrita, C. capitella, C. thyrsiflora, et fortasse *aliæ in Thunb. prod. p.* 55. *&c.*

GLOBULEA. *Nob. in Syn. succ.* 60. Crassula *Aliorum.*

* Fruticulosæ. Caulibus fruticulosis.

G. (shrubby.) *Nob. in Syn. succ. l. c.* *Crassula cultrata Aliorum. Dill. elth. f.* 114.— *Bot. mag.* 1940. *cultrata.* 1.

** Herbaceæ, foliis radicalibus cespitosè decussatis.

G. (large-leaved, grey) foliis ventricosè lanceolatis s. subacinaciformibus cultratis subtus convexi- *capitata.* 2.

usculis, imbricatim decussatis: junioribus canis.

Crassula capitata. Cat. hort. dyck. 1820. *p.* 14.

Communicavit illustr. Princeps de Salm Dyck, 1819.

Obs. G. obvallari simillima, at major, foliis magis acinaciformibus, sæpe sescunciam latis.

Floret Julio, fere ut in G. obvallari. G. H. ♃.

obvallata. 3. G. (Houseleek-leaved.) *Globulea obvallata. Nob. in Syn. succ.* 60.—*Crassula obvallaris. Hortorum.*

canescens. 4. G. (middle grey). *Nob. in Syn. succ.* 61.

*

nudicaulis. 5. G. (slender cespitose, grey) foliis subulatis supra planatim subsemiteretibus canescente-puberulentibus. *Nob. in Syn. succ.* 61.

Crassulan udicaulis Aliorum.—Crassula cespitosa longifolia. Dill. elth. f. 115.

Communicavit Illust. Pr. de Salm Dyck, 1821.

sulcata. 6. G. (slender cespitose, green) foliis incurvis subulatis semiteretibus saturatè viridibus nitidis latè canaliculatis.

Communicavit amicus Dom. Law. G. H. ♃.

Obs. E Cap. B. S. sine dubio.

Præcedenti simillima, differt colore, et absque pubescentia, foliis supra latè sulcatis. Subinde habet foliorum margines imperfectè et minutè ciliatas. *Flores* prioris, at non possideo.

VAUANTHES. (V-flower.) Crassula *Linn.*

Calyx campanulatus 5-fidus erectus. *Corolla* 1-pe-

tala basi tubulosa, limbo 5-6-petaloideo. *Stamina* filamenta 5-6 tubo infernè adnata. *Squamulæ* germinis nullæ !

Obs. A Crassulinis generibus differt in absentia squamularum ; rursumque discrepat a Cotyledone habitu numeroque filamentorum.

Herba annua exigua nuda glabra succulenta. Simulat parvam Gentianam, Chloramve.

V. (Chlora-flowered). *Chloræ-*
Crassula dichotoma. Linn. sp. pl. 404.—*Ait. kew. ed.* 1. 392. *flora* 1. *

Caules 6-9-lineares erecti (s. in caldario decumbentes) teretes purpurascentes. *Folia* opposita remota sessilia basi distincta cordato-amplexicaulia, s. ovato-acuminata, basi cordata pallidè viridia glabra expansa. *Flores* terminales umbellato-dichotomi pauculi. *Pedunculi* graciles filiformes 6-10-lineares erecto-patuli. *Calyx* 1-phyllus 5-partitus obtusangulatus validus s. grossus, laciniis obtusis rotundatisve, externè convexiusculis. *Corolla monopetala*, 5-6-partita basin versus tubulosa, (tubo calycem æquante) supernè 5-petaloidea, laciniis ovatis rotatim expansis 5-6-linearibus luteis. *Filamenta* 5-6, tubo infernè adnata, stylorum longitudine. *Antheræ* luteæ. *Styli* a germinibus progredientes, subulati, stigmatibus lente capitulatis, altitudine tubi corollæ plusve.

Obs. *Corollæ* laciniæ basi eleganter notatæ sunt literâ vau reversâ parvâ rubrâ : unde nomen.

Habitat C. B. S. G. H. ☉.
Floret Jul.

COTYLEDON. *Linn. gen. pl. &c.*

C. (three-flowered) foliis obovatis carnosis inte- *triflora.* 1.

gris, floribus spicatis ternis sessilibus. *Thunb. prodr.* 83.

Cum sequente communicavit Illust. Pr. de Salm Dyck, A.D. 1821. G. H. ♄.

Jasminiflora. 2. * C. (Jasmine-flowered) suffrutescens; foliis carnosis, lanceolatis vel oblongo-spathulatis viridibus nitidis, pedunculo ramoso, floribus longe pedicellatis, pedicellis incrassatis obclavatis. *Salm. obs. bot. p.* 38.

E C. B. S. in anno 1818. G. H. ♄.

undulata. 3. * C. (waved.) *Suppl. pl. succ.* 20.—*Burm. dec. t.* 19. *f.* 2?

Obs. Simulat C. orbicularem, at longe humilior, foliis incipientibus apice magis undulatis cuspidatisque.

oblonga. 4. * C. (oblong-leaved.) *Nob. in Syn. succ.* 106.

Obs. Duas varietates vidi.

α major foliis quadriuncialibus 2-3 latis farinoso-albis. *Flores* fortè omnium maximi paniculâque magis productâ. *Filamenta* corolla breviora. *Styli* staminum longitudine. In cæteris cum Cotyledone orbiculari convenit.

Florebat apud Kew in regio horto Mai. 1820, cum sequente.

An Cotyledon paniculata. *Thunb. prodrom.* 83.?

Communicavit amicus Dom. Aiton.

β minor, duplo plusve.

Flores non vidi.

papillaris. 5. C. (Cacalia-like.) *Nob. in Suppl. succ.* 21.

Obs. *Flores* apud Kew, Mai. 1820, fere ut in C. orbiculari, at 2-3-plo forte minores.

C. (Cacalia-leaved) foliis teretibus floribus paniculatis caule fruticoso. *Thunb. prod.* 83. *Cacalioides.* 6.
Habitat C. B. S.
Floret Mai. G. H. ♄.
Obs. In regio horto Kewense duæ species vigent, foliis variabilibus teretiusculis s. clavato-subcuneatis farinoso-albis. Viz. C. papillaris *Thunb. prod.* 83, foliis carnosis oppositis tereti-ovatis [retusisve cum mucrone] glabris, floribus pedunculatis; et C. Cacalioides; foliis teretibus, floribus paniculatis, caule fruticoso. Difficillimè distinguuntur, at apparent species duæ.

C. (spotted-leaved) suffrutescens, foliis ovato-spathulatis basi subauriculatis, carnosis nitidis, utrinque maculis atro-rubentibus notatis: Floribus spicatis, subalternis. *Obs. bot. in Horto dykensi, printed A.D.* 1820. *page* 5. *maculata.* 7. *
Olim Cotyledon alternans. Cat. hort. dyck., et inde Cotyledon alternans? Nobis in Suppl. pl. succ. p. 28.
Bis accepi ab. illust. Principe de Salm Dyck, nomine Cot. alternans. *Willd.?* At sine dubio alia est, quoque species pulchra.

C. (*Suppl. pl. succ.* 22.) *mammillaris.* 8. *
Obs. *Flores* terminales in racemo 3-4-floro parum paniculato, infernè bracteato. *Pedunculi* graciles 6-12-lineares erecti nutantesve, cum calycibus uti corollis, ramentaceo-pubescentes. *Calyx* 5-phyllus foliolis erecto-appressis oblongo-linearibus acutis. *Corolla* ventricosa 9-linearis sordidè fulvescens, laciniis 5 subrevolutis acutis. *Genitalia* inclusa corollâ dimidio breviora. *Filamenta* 10, sordidè flavescentia, lente villosa, basi intùs planiuscula externè convexa, apicem

versus sensim attenuata, horum 5 lineam humiliora : omnia basi corollæ adnata. *Antheræ* luteæ. *Styli* 5, subulati, albi in germine viridi deorsum sensim dilatantes.

Florem unicum ex horto regio Kewense solum examinavi in Junio 1819.

dichotoma. 9. * C. (fork-spined.) *Suppl. pl. succ.* 27.

Obs. *Folia* subinde canaliculata. *Flores* (in exemplari solitario, e regio horto Kewense in Junio 1820) subcymosi quatuor terminales. *Cyma* tenuis dichotoma 2-uncialis, spinis patentibus 3-linearibus bracteaceis septem, fere basi pedunculorum. *Pedunculi* erectiusculi minus patuli subcapillacei at rigidi, fere unciales, in lente cum floribus puberuli. *Calyx* 5-partitus exiguus, demum plus minus refractus atque marcescens. *Corolla* 5-angularis subampullæformis 5-fida, sordidè virescens, laciniis lanceolatis acuminatis villosulis, apud anthesin arctissimè retrofractis tubove retro-adpressis : sed post florescentiam variè assurgentibus patulisve immunibus, at extus ad lentem rubro punctatis lineolâque rubrâ dorsali. *Filamenta* 10, æqualia, corollæ tubum vix superantia, eoque infernè connata, lente subvillosula. *Germina* 5 arctè collecta cohærentiave in figuram fere ampullaceam 5-sulcatam ; finientia in *stylis* 5, *stigmatibusque* exiguis totidem, at manifestè capitellatis, *antheras* erectas parum superantibus.

Ad basin singuli germinis, eoque adnata, exstat squamula quadrata emarginata pallida oculo nudo manifesta.

Fere genus proprium.

KALENCHÖE. *Adanson.* — *Decand.*— *Nob. in Syn. succ. p.* 109.—*Cotyledon. Linn.*—*Veria. Kenn. in Bot. rep.*

Suffrutices africani s. herbæ carnosæ glabræ nudæ, foliis oppositis plus minus dentatis pinnato-sectisve, rarius integris, vel ad apicem solùm dentatis. *Flores* terminales subcorymbosè paniculati, sæpius lutei vel rufescentes; at in una specie albi.

K. (yellow-spatulate.) *Decand. in Pl. grass. cum icone* 65. *spathulata.*
St. ♄. s. ♃. 1.

K. (red-spatulate.) *Decand. in Pl. grass. cum icone* 64. *ægyptiaca.*
Amicus V. Marum Eques communicavit cum priore. 2.
St. ♄. s. ♃.

K. (white-flowered.) *acutiflora.*
Veria acutiflora. Bot. rep. 460.
St. ♄. 3.

K. (great notch-leaved.) *crenata.*
Veria crenata. Kenn. in Bot. rep. t. 21. 4.
St. ♄.

K. (cut-leaved.) *Decand. in Pl. grass. cum icone.* *laciniata.*
St. ♄. 5.

K. (buck's-horn-leaved) foliis pedato-bipinnatis inciso-dentatis pallidè viridibus, cauleque ramoso succulentis. *ceratophylla.* 6. *
Obs. A præcedente satis discrepat foliorum formâ, et magis ramosâ.

Viget in regio horto Kewense. St. ♄.
Habitat in Sina.
Flores ignoti.
Fortasse *Bryophylli* species, nempe folia facillimè radicant. Flores docebunt.

ANACAMPSEROS. *Ray et Tournef. Nob. in Syn. succ. p.* 111.

arguta. 1. * A. (lance-toothed carpathian) foliis oblongo-lanceolatis argutè dentatis.
Habitat in alpibus Carpathicis.
Introd. a Dom. Whitley et Co. 1820. H. ♃.
Floret....
Obs. Anacampseroti vulgari Nobis (Sedo Telephio γ *Linn.*) simillima, at duplo altior, foliorumque dentibus profundioribus.

paucidens. 2. * A. (few-toothed) foliis cuneato-obovatis, apicem versus sub-4-dentatis; caulibus semipedalibus.
Habitat....
Florebat in regio horto Kewense, Aug. 1820. H. ♃.
Obs. *Caules* effuso-decumbentes. *Folia* alterna contigua glaucescentia. *Flores* ut in affinibus paniculato-corymbosi copiosi albicantes.
Sedo Telephio γ *Linn.* affinis, at longè humilior, foliis latioribus apicem versus 2-4-solum-dentatis.

pectinata. 3. * A. (pectinated) foliis lanceolato-oblongis pectinato-dentatis.
Habitat....
Vidi post florescentiam in regio horto Kewense, Apr. 27, 1820. H. ♃.

Obs. Caules foliosi solum annui, 3-4-unciales e radice (forte plus minus strumosa) perenni. *Flores* terminales capitati. *Foliola* calycis 4. *Petala* 4 (post anthesin) parva albo-viridia canaliculato-incurva foliolis calycis duplo latiora pauloque longiora, at valde inconspicua. *Stamina* non vidi, at forte rectim 8. *Germina* 4.
Penthori facies. Vix genus proprium.

A. (livid) foliis obovato-cuneatis dealbato-lividis; floribus cymosis. *livida.* 4.
Sedum lividum. Willd. enum. supp. p. 24.
Habitat .... G. H.? (forte H.) ♃.
Caules vix semipedales, (annui ?) *Folia* sub-uncialia. Locus est incertus.
Communicavit amicus V. Marum Eques, cum variis aliis succulentis.
Flores cymosi albi.

A. (fringed) foliis oppositis cuneato-obovatis, supernè dentatis; margine costa subtus, cauleque puberulis; cyma sessili terminali conferta. *ciliaris.* 5. *
Anacampseros ciliaris. Nob. in Syn. succ. 113. *A.D.* 1812.—*Sedum oppositifolium. Bot. mag.* 1807. *A. D.* 1816.
Habitat in Monte Caucaso.
Caules decumbentes ad nodos radicantes; floriferi erecti, radice perenni. Vix satis a sequente distincta, at duplo minor, foliis angustioribus, cyma magis compacta. Flores albi nec rubri.

A. (greater fringed) foliis oppositis subrotundo-obovatis basi cuneatis, apice crenatis; margine, costa subtus, cauleque cartilagineo-puberulis: cyma divaricata, floribus rubris. Sedum spurium. *Willd. enum. p.* 484. *spuria.* 6.

HABITAT in rupestribus Caucasi. H. ♃.
Cum priore et sequente in autumno floret.

dentata. 7. * A. (large toothed) nuda: foliis alternis cuneato-obovatis dentatis, supremis deorsum pinnatisecto-dentatis magisque petiolatis: cyma sessili terminali.

HABITAT .... H. ♃.

OBS. This is the plant which is called *Sedum dentatum* in gardens, as mentioned in *Bot. magaz.* 1807, but I am not by any means certain of its being the *denticulatum* of Donn's catalogue. As a species it is extremely distinct from the two preceding; although nearly intermediate in size. The leaves (not to repeat what is given in the specific character) are more shining, and upon far slenderer or longer and more deeply-channelled petioles. Nevertheless, all the three at first sight are very much alike.

SEDUM. *Linn. &c.—Syn. succ. p.* 115.

quinquefidum. 1. * S. (linear-leaved) foliis sparsis spathulato-linearibus viridibus, floribus subternis subsessilibus terminalibus quinquepetalis, radice perenni.

HABITAT .... H. ♃.

OBS. Sub hoc nomine viget in hortis Londinensibus. Simillimum est Sedo 4-fido *Willd.* at petalorum numero discrepat. An varietas? *Petala* viridi-alba, suprema folia vix superantia.

Sedum quadrifidum in hortis nostris nunc oblitum. Parvam plantam, et olim, solum vidi, sine flore.

hexapetalum. 2. * S. (perennial 6-petaled) caulibus simplicibus, foliis linearibus sparsis teretiusculis, supra planis, radice perenni.

Sedum lineare. Thunb. jap. 187?—*Willd. enum.* 766?—*Sedum sexfidum. Hortorum.*

Obs. Messrs. Loddiges favoured me with a specimen of this plant in flower, from their splendid collection in June last, under the name of *Sedum sexfidum;* which name being occupied by the following species, could not with propriety be here retained. The present article very much resembles *Sedum quadrifidum* of Willd., and but for the name, I should have thought them the same. A detailed description of *S. hexapetalum* I have mislaid, and drawn up this account of it from memory only. Perhaps a var. of S. 5-fidum. Perhaps of 4-fidum. *Perhaps the three* are one. I have not the means of deciding at present, and have only been able to procure a single and imperfect specimen of each, and those at different and distant times, preventing due comparison.

S. (annual 6-petaled) foliis teretiusculis glaucescentibus, caule diviso, cymis bipartitis, floribus dodecandris hexapetalis, patulis mucronatis trinerviis. *Willd. enum.* 487. *sexfidum.* 3.

Habitat in Caucasiæ rupestribus. H. ⊙.

In July 1819, I was favoured with specimens of this plant, by the name of *S. sexfidum,* at Mr. Jenkins's neat gardens in the City Road; where there is one of the finest collections of hardy herbaceous plants in this country, arranged in Linnæan classes; and open to the public through an annual and moderate subscription.

This plant also occurs in our collections under the names of *S. glaucum* and *pallens,* and even *pallidum;* which last is marked as a ♃ in *Willd.*

enum. suppl. p. 24, and is unknown to me. How far it really differs from the following species I confess I have yet to learn. But Willdenow, in the place above cited, says—"Simillimum Sedo glauco, sed diversum: foliis minus glaucis longioribus, caule diviso, qui in Sedo glauco simplex apice cyma trifida instructus, cymis bipartitis, vel ramis simplicibus indivisis floribus obsitis, petalis trinerviis, quæ uninervia in Sedo glauco." *Willd. l. c.*

glaucum. 4. S. (annual glaucous) foliis teretiusculis glaucis, cyma trifida, ramis recurvato-patentibus, floribus dodecandris hexapetalis, petalis mucronatis uninerviis. *Willd. enum. p.* 486.—*Walst. et Kit. hung.* 2. *p.* 198. *t.* 181.

HABITAT in collibus arenosis Banatûs. H. ♂.

OBS. This name must remain with the present plant by right of priority, the only just right (absurd names ever excepted) in such cases: and the *Sedum glaucum* of Curtis, (*in his Garden and Catalogues*), of *English Botany*, and of *Syn. pl. succ.*, must receive another appellation: I here propose the name of

albescens. 5. * S. (perennial glaucous.)

Sedum glaucum. Curtis: Haworth: Smith.

OBS. The var. β of *Syn. succ.* 117, is the plant figured in *Engl. bot. t.* 2477.

recurvatum. 6. S. (recurved) foliis tereti-subulatis mucronatis glaucescentibus, ramorum sterilium reflexis, floralium recurvato-patentibus, ramis cymæ recurvatis. *Willd. enum. suppl.* 25.

OBS. Planta parva, e regio horto Berolinense, A. D. 1820, sub hoc nomine, in horto Chelsei-

ano nunc viget : *ramis* decumbentibus vix semipedalibus valde foliosis : *foliis* expansis linearibus vix subulatis incurvis glaucis subtus convexulis supra planiusculis. Non est Sedum reflexum Botanicorum anglicanorum, sed 3-plo minus, et magis affine Sedo glauco *Engl. bot.* 2477. At forte minus, et alium. Est Sedum reflexum *Linn.* secundum *Willd.*

S. (glaucous and green-leaved) foliis tereti-subulatis acutis, ramorum sterilium glaucescentibus patentibus, floralium erecto-patulis, ramis cymæ recurvis. *Willd. supp. p.* 25. *collinum.* 7.

Viget in regio horto Kewense.

Flores (Julio) pallidè luteo-virescentes. *Folia* glauca : interdum viridia.

Præcedenti et sequenti affinis. Folia glauca : interdum viridia.

S. (pale-flowered) foliis tereti-subulatis, ramorum sterilium patentibus glaucescentibus, caulis floriferi patulis compressis, cymæ ramis confertis erectis. *Willd. suppl. p.* 25. *virescens.* 8.

Obs. Folia virescentia. Flores fere albi.

Cum duobus sequentibus communicavit illustr. Pr. de Salm Dyck, 1821.

Vidi apud Kew.

S. *Willd.*—*S. anopetalum. Hort. dyck. cat.* 34. *anopetalum.* 9. *

Hoc est affine priori. Perfectum non vidi.

S. *Hort. par.* (nutant yellow.) *nutans.* 10. *

Affine prioribus. Perfectum non vidi.

S. (oblong-leaved) foliis ovatis parabolico-oblongisque subtus convexis 4-linearibus subdistantibus. *oblongum.* 11. *

Habitat in Anglia.
Floret Jul.—Aug. H. ♃.
Obs. Sedo anglico duplo majus foliis paucioribus distantioribus. Simulat quoque Sedum album. Germinis squamulæ ordinariæ fuscæ.
Obs. This and the two following are described from Chelsea garden.

anglicum. S. (small English) foliis cordato-ovatis subtus convexis 3-linearibus confertis.
12. *Sedum anglicum. Engl. bot.* 171.—*Sedum anglicum* β. *Nob. in Syn. succ.* 120.
Habitat in Anglia, Hiberniaque.
Floret Jul.—Aug. H. ♃.
Priore duplo minus. *Petala* rosea. *Styli* intùs, squamulæque germinis rubri.
β *microphyllum* (least English): foliis cordato-ovatis subtus convexis bilinearibus glomeratissimis.
Habitat in Anglia.
Floret Jul.—Aug. H. ♃.
Sedum anglicum α. *Nob. in Syn. succ.* 120.
Obs. Ultimo fere triplo minus, floribus toto albis. Germinis squamulæ rubræ. Propria species forsan.

pallens. S. (5-petaled annual glaucous) foliis tereti-subula-
13. tis subincurvis glaucis, caule ramosissimo, ramis
* expansis, floribus 5-petalis; petalis lanceolato-acuminatis.
Sedum pallens. Nob. in Suppl. pl. succ. 29.
Habitat .... H. ⊙. s. ♂.
Floret Jul.
Obs. *Caules, calyces* uti *corolla* externè quoque germina lente puberuli. *Calycis* foliola parva ovato-acuta. *Flores* paniculato-cymosi albi,

cymis dichotomis; inferiores (flores) brevissimè pedunculati. *Squamulæ* ordinariæ ad basin filamentorum petalorumve albæ. *Filamenta* 10, corolla breviora, *antheris* parvis fuscis. *Styli* nudi nivei subulati germinum longitudine, *antherasque* fere æquantes. *Germina* oblongo-teretia. An varietas pentapetala Sedi sexfidi, supra?

S. (dwarf-whirled.) *Willd. enum.* 486, *et Suppl. pl. succ.* 29. *monregalense.* 14.

Obs. *Flores,* in Junio, cymoso-paniculati 5-petali albi stellares. *Caules* floriferi 4-6-unciales.

S. (pubescent blue) subpubescens; floribus paniculato-cymosis 7-8-petalis; foliis expansis semiteretibus obtusis canaliculatis. *cæruleum.* 15.

Sedum cæruleum. Linn. mant. 241.

Habitat . . . .

Floret Jul. H. ⊙.

Obs. *Caulis* flexuosus ramosus rubens, uti *folia* sparsa, opposita decussataque, (in exemp. nost.) 4-uncialis. Ad lentem omnino (floribus exceptis) villosulum. *Calycis* foliola 7-9, parabolica. *Corolla* minuta petalis 7-8, stellatim expansis, apice incurvulis oblongis læte cæruleis. *Filamenta* circiter 12 alba *antheris* fuscis, stylis parum humiliora. *Styli* 7-9, albi subulati petalis breviores. Species pulchella.

Obs. I received the specimen here described by the name of *S. leptopetalum,* from the fine collection of Messrs. Jenkins in the New Road.

β *violaceum* (pale violet); foliis oblongis alternis obtusis basi solutis, cyma bifida glabra. *Willd. sp. pl.* 2. 766.—*Bot. regist.* 520.

Obs. Whether this plant is really different from

the above, I have not the means of deciding; but Willdenow says his plant is not the same as the one of Linnæus, which we presume our really blue 7-petaled one to be. The *Bot. register* says, *p.* 520, the petals of the plant there delineated are pale violet, and do not turn blue until they are dried; and they are figured of a rosey hue, or rather of the colour of the blossom of the peach.

saxatile. S. (rock, small-leaved) foliis sparsis semiteretibus
16. obtusis basi solutis, caule ramoso decumbente. *Willd. sp. pl.* 2. *p.* 765.
HABITAT in Alpibus. H. ⊙. s. ♂.
Communicavit Dom. Gul. Anderson, A.D. 1820.

Semper-vivoides. S. (Houseleek-like).
17. Under this name there is a plant in Chelsea Garden, raised from seeds sent by Mr. Otto from
* the Royal Gardens of Berlin. See the end of this work for a further account of it.

HEXANDRIA. MONOGYNIA.

BULBINE. *Willd. enum.* 372.

Spatha 0. *Corolla* 6-partita patens. *Filamenta* barbata. *Caps.* subrotunda. *Sem.* angulata. *Willd. enum. p.* 372.

rostrata. B. (glaucous shrubby) foliis carnosis teretibus
1. glaucis, caule fruticoso brevissimo radicante. *Willd. enum. p.* 372?

Habitat C. B. S. G. H. ♄.
Vigebat in regio horto Kéwense, A. D. 1819? s. 1820.
Flores affinium lutei.

B. (grassy) foliis carnosis lineari-subulatis striatulis viridibus supra planis, subtus convexis. *graminea.*
Viget in hort. Chels. G. H. ♃. 2.
Obs. Acaulis, folia omnia radicalia ambientia, patula. *Flores* lutei ut in cæteris, scapo pedali, Julio 1820. *

B. (large, Aloë-like) foliis carnosis oblongo-lanceolatis acuminatis nervosis rectis scapo quadruplo brevioribus. *latifolia.* 3.
Anthericum latifolium. Willd. sp. pl. 2. 144.
Habitat C. B. S. G. H. ♃. s. ♄.
Vigebat in regio horto Kewense, A.D. 1819.
Flores lutei ut in B. Alooides.

B. (nodding-flowered) foliis lineari-ensiformibus scapo brevioribus, racemo ovato cernuo. Anthericum nutans. *Thunb. prod.* 63. *nutans.* 4.
Viget cum sequente, et floret ut in affinibus, Junio mense, in regio horto Kewense.

B. (bulbous) bulbo depresso, filamentis declinatis, omnibus barbatis. Anthericum bulbosum. *Br. prod. nov. holl.* 275. *bulbosa.* 5.
Affinium flores.

B. (half-bearded) radicibus fibrosis, filamentis declinatis exterioribus imberbibus. Anthericum semibarbatum. *Br. prod. nov. holl.* 275. *semibarbata.* 6.
Vigebat apud Dom. Loddiges A. D. 1820. G. H. ♃.

Obs. Huc etiam referenda Anthericum Alooides—longiscapum, et Asphodeloides—necnon annuum et pugioniforme *Synops. pl. succ.*—cum aliis Anthericis filamentis barbatis.

YUCCA. *Linn. &c.*

Obs. Germina infernè ad pedunculos articulata, et inde post anthesin in hortis, sæpissime caduca.

glaucescens. 1. * Y. (glaucous thready.) *Suppl. pl. succ. p.* 35.
Obs. *Flores* magni tulipiformes albi, petalis exterioribus extus costâ latè subochraceâ. Stigmata semilongitudine staminum confluentia.
Florebat Jul.—Aug. Apud Dom. Whitley et Co. in panicula magna sumptuosa, ut in plurimis.

angustifolia. 2. Y. (narrow-leaved, thready.) *Suppl. pl. succ.* 35.
Obs. *Florebat* sumptuosè apud Dom. Whitley, Brames et Milne, Jul. 1820.
Obs. Ampla florum et densa panicula (cum planta subacauli) fere orgyalis, ramo principe longo producto. *Flores* confertè approximati vix aperti, viridi-pallescentes, petalis *exterioribus* sordidè rufescentibus longè angustioribus elliptico-lanceolatis: *interioribus* ovato-orbicularibus cochleariformibus. *Stigmata* robustissima viridia confluentia.

rufocincta. 3. * Y. (rufous-edged.) *Suppl. pl. succ. p.* 37.
Obs. Florebat aëre aperto in hort. Chels. Jul. 1820, floribus fere ut in affinibus, in panicula magna densa pallescente.

AGAVE. *Linn. &c.*

A. (many-black-spined) foliis lorato-lanceolatis acuminatis concavo-convexiusculis perviridibus, spinis marginalibus brevibus subtriangularibus numerosissimis sursum subincurvantibus atropurpurascentibus. *poly-acantha.* 1. *

Habitat .... St. ♃.

Obs. Statura et habitus A. viviparæ, at foliis sesquipedalibus longè saturatioribus, spinis validis ad lucem atro-purpurascentibus, subalternatim sæpe dimidiatis.

Obs. This noble plant I have known nearly twenty years, in the fine collection of the Earl of Tankerville, at Walton upon Thames, where his lordship's excellent gardener Mr. Richardson manages and annually flowers the finest specimens of about 150 species of Mesembryanthemum I have ever seen.

A. (narrow-leaved.) *Syn. succ.* 72. *angusti-folia.* 2. *

Obs. There are two plants of *Agave angustifolia* in Chelsea garden, lately brought from the rock of St. Helena, by which we learn its native place. They were short-leaved on their arrival; but cultivation has already nearly communicated to them their customary appearance with us.

PACHIDENDRON. Aloë *Linn. &c.*

Perigonii longi cylindrici laciniæ, genitaliaque altè porrectæ, assurgenter falcatim incurvantes. Cætera fere ut in Aloë.

Arbusculæ africanæ, propaginibus nullis: caudice semper simplici lignoso erecto grosso, senecto

20-pedali ultraque, et siccatis foliis eorumque cicatricibus subinfractim incomptè onusto. *Folia* capitatim terminalia, ambienter multifaria, erecto-expansa recurva retrofractave, sæpe pedalia plusque ensiformia, s. sublanceolata amplexicaulia basi arctissimè vaginantia crassa succulenta, epidermide duro lævi; tuberculatim-spinosa, vel semper ciliato-spinosa. *Flores* terminales in spica densa longa superba lutea luteococcineave. *Corollæ* potiusve *Perigonia* pendulæ (e pedunculis suberectis) tubulosæ, apicem versus falcatim assurgentes.

* Angustifolia, foliis ensiformibus patulo-recurvantibus, floribus flavis.

africanum. 1. * P. (great red-spined) foliis latè ensiformibus erecto-subrecurvantibus lævibus duris, adultis post medium recurvis: spinis marginalibus, dorsalibusque apicis igneis.

Aloë africana. Mill. dic. ed. 8. *No.* 4.—*Nob. in Linn. soc. tr. vol.* 8. *p.* 21. — *Aloë perfoliata africana. Hort. kew. ed.* 1. *p.* 466.—*Aloë africana. Hort. kew. ed.* 2. *v.* 2. *p.* 296.—*Comm. prælud.* 68. *t.* 18?—*Hort.* 14?

Habitat C. B. S.

Floret Feb.—Mai. G. H. ♄.

α latum.

Aloë africana α, latifolia. Nob. in Supp. pl. p. 47 et 106.

Obs. *Flores* tubulosi, in vasta lutea eximiaque spica, penduli, e pedunculis erectis gracilibus. *Perigonium* sesquiunciale superne cum laciniis curvatim arctè assurgens. *Genitalia* quoque falcatim-orientia, et porrecta nudaque ultra perigonium usque ad 4-5-lineas. *Filamenta* intra

tubum aurantio-rubra ; eorum insertionem non exactè vidi. *Antheræ* magnæ. *Stylus* lutescens validus antheras superans.

Obs. Flores 2-3 Kewenses defloratos mancos *morientes*, at copiosissimè mellifluos, solum examinavi.

β *angustum* ; foliis fere duplo angustioribus quam α, et magis recurvantibus.

Aloë africana β, *angustior. Nob. in Suppl. pl. succ. p.* 47.—*Aloë pseudo-africana. Salm. hort. Dyck. A.D.* 1820. *p.* 6.

Floret Nov.—Feb. ut in α.

Obs. It appears by two exact outline drawings obligingly communicated to the author by his Highness the Prince de Salm Dyck,—the one representing the abovementioned *P. africanum* β —the other the *A. africana* of his Highness's *Catal. rais. d'Aloë*—it appears, it is repeated, that these two plants are distinct species ; and that the latter should be distinguished from the former, which is the *A. africana* of *Mill. dic. ed.* 8, and other subsequent authors. Wherefore, until a better diagnosis can be prepared, the following is proposed for the *A. africana* of His Highness the Prince, which in its appearance is indeed a princely plant, and doubtless congenerous with Miller's *Aloë africana.*

P. (revolving, red-spined) foliis ensiformibus subconcavis perviridibus erecto-recurvis, adultis expansè in semicirculum revolventibus, spinis marginalibus dorsalibusque apicis rubris. *principis.* 2. *

Aloë africana. Pr. de Salm dyck. cat. raison. d'Al. 62, nec *Aliorum.*

Obs. A priore foliorum directione discrepat. In

P. africano, folia adulta expansa, post medium solum recurva fere in arcum, folia ima (ut in omnibus ferè) plus minus reflexa. In P. principe folia adulta ab initio revolventia, paginis inferioribus spinulis subseriatim longitudinaliter sparsis distantibus, et fortè numerosioribus quam in P. africano.

Obs. Figura in Comm. hort. Amst. 14. forte repræsentat Aloën arborescentem; ut olim optimè judicavit Millerus.

angustifolium. 3. * P. (the narrow rough) foliis revoluto-recurvis anguste-ensiformibus glaucis undique parcè tuberculato-spinosis; spinis marginalibus igneis.

Aloë angustifolia. Nobis in Suppl. pl. succ. 47.

Habitat C. B. S.

Flores non vidi. G. H. ♄.

Unam plantam solum vidi, sine ramulis sobolibusve.

** Latifolia, foliis sublanceolatis: floribus brevibus vix incurvatis, ore recto. Si genus cum sequentibus speciebus novum, nomen Agriodendron propono.

ferox. 4. * P. (great hedge hog) foliis ovato-ensiformibus glaucis deflexis, undique, at subtus præcipuè, regulariter sparsè spinosissimis.

Aloë ferox. Nob. in Linn. tr. 8. *p.* 21.—*A. perfoliata ferox. Hort. kew. ed.* 1. *p.* 467.—*A. ferox ed.* 2.—*aliorumque.—Bot. mag. t.* 1975. —*Pl. gr.* 32.

pseudoferox. 5. * P. (false hedge-hog) foliis ovato-ensiformibus glaucis deflexis subtus tuberculato-spinosis, supra subinermibus.

Aloë pseudo-ferox. Pr. de Salm Dyck in Catal. rais. d'Aloë. p. 31.—*A. ferox* β. *Nob. in Syn. succ. p.* 77.—*A. &c. Comm. prælud. t.* 20.
HABITAT C. B. S. St. ♄.
Flores uon vidi.
OBS. Spinæ marginales in hoc et præcedente atrorubentes.

P. (upright hedgehog) foliis oblongo-ensiformibus glaucescentibus incurvo-adscendentibus supra lævibus, subtus sparsè tuberculato-spinosis. *supralæve.* 6. *
Aloë supralævis. Nob. in Linn. tr. v. 8. *p.* 22.—*Hort. kew. ed.* 2. 2. 293.
HABITAT C. B. S. G. H. ♄.
Flores non vidi.

ALOË. *Linn. &c.*

Calyx petaloideus, rectus, cylindraceus. *Capsula* parum costata. *Frutices* caulescentes floribus pendulis. *Duval, plantæ succulentæ in Horto Alençonio, A. D.* 1809. *p.* 5.
OBS. Caules floriferi, variè spathaceo-bracteati.

A. (the white spotted) foliis lorato-ensiformibus deorsum albo perbelle guttatis: spinis marginalibus mediocribus igneis. *spicata.* 1.
Aloë spicata. Nob. in Syn. succ. 76.—*Willd. sp. pl.* 2. 185?
OBS. Guttæ s. maculæ albæ, in pagina superiore sparsæ ovales et præcipuè infra medium. Spinæ marginales numerosæ, in caldario virides, apicibus respicientibus igneis. In caldario solum vidi, sine flore.

glauca. 2. * A. (glaucous.) *Syn. succ.* 79.—*&c.*
γ *spinosior* (long-spined); nova varietas, foliis magis patulis fortè minus glaucis, infernè tuberculis paucis apicem versus: spinis marginalibus longioribus latioribus, igneo-rubris; caule pedali lignoso.
Apud Kew, nuper a C. B. S.

lineata. 3. * A. (lineated) foliis erecto-expansis oblongo-ensiformibus viridibus, spinis rubris. *Nob. in Syn. succ. &c.* 79.
α *viridis*; foliis saturate viridibus lineatis, spinis marginalibus validis subrecurvis rubris.
β *glaucescens*; foliis oblongo-ensiformibus glaucescentibus lineis conspicuis parallelis viridibus pallidisve: spinis validis marginalibus numerosis respicientibus igneis basi viridibus.
In regio horto Kewense vigebat A. D. 1819.
Folia læte glaucescentia, spinis forte longioribus quam in α.
Varietas formosa, et conspicua, nuper a C. B. S.

obscura. 4. * A. (dotted soap.) *Syn. succ.* 82. *&c.*
β *glaucior*; foliis glaucioribus, maculis rotundis sparsis obscuris saturatioribus.
γ *magnidens*; foliis saturatioribus maculis obsoletis: marginalibus dentibus majoribus, s. distantioribus.
Viget cum β, in regio horto Kewense. Ambæ nuper e C. B. S.

albo-cincta. 5. * A. (great pearl-edged.) *Nob. in suppl. pl. succ. p.* 42.—Fortasse est mera junior Al. striatæ Nobis, paniculatæ Jacq.—Tempus docebit.
Obs. Aloë rufocincta. *Nob. in Suppl. pl. succ.*

Nunc gerit magna bipedalia folia fere ut in Fourcrœâ: sed credo hujus generis, ob foliorum involutionem. Flores docebunt.

A. (pale, serrulate) depressa, foliis lorato-lanceolatis pallide viridibus, lineis et maculis obsoletis pallidis perviridibusque: spinis marginalibus numerosis parvis albis. *pallescens.* 6. *

Obs. Al. saponariæ s. serrulatæ similis, at fortè longe minor: magis depressa, pallidior: maculis obsoletioribus. Flores ignoti. Plantam juniorem casualiter solum vidi in horto amicissimi Dom. Hitchin.

An varietas A. serrulatæ? vix.

A. (common soap.) *Syn. succ.* 83. *saponaria.* 7. *

β *luteo-striata;* Aloë umbellata *picta;* foliis longitudinaliter luteo-striatis. *Pr. de Salm Dyck in Catal. rais. d'Al. p.* 27.

Communicavit ipse Princeps, A.D. 1821.

A. β *semiguttata.* (half-warted) foliis ovato-longè-acuminatis, supra glabris subtus tuberculatis: carina apicis marginibusque crebrè spinosis. *suberecta.* 8. *

Habitat C. B. S.? G. H. ♃.

Statura et magnitudine A. suberectæ; differt præcipuè tuberculis valde numerosis albis in foliorum pagina inferiore. A. acuminatam quoque simulat, at 2-plo plusve major, foliis forte magis patulis, spinis marginalibus carinæque albis multo crebrioribus. Soboles rarius profert. Forte propria species.

A. (great tuberculose) foliis oblongo-lanceolatis spinoso-dentatis, subtus albo-verrucosis, corollis *echinata.* 9.

cernuis cylindraceo-ventricosis, petalis inæqualibus. *Salm. d'Aloë*, p. 21.

Obs. A. tuberculatæ Nob. similis, at fortè duplo major. Unam plantam solum vidi.

Communicavit Princeps de Salm Dyck, A. D. 1821.

Obs. It is possible that all the plants of this section (Acaules) may anciently have arisen in the gardens, or more likely in their native wilds, from the casual mixture of two or three. But, as there is no proof of this; and even be it as it may, we are of opinion that it best accords with the interests of Botany as a science, and with our easier understanding these difficult plants, to arrange them as species, rather than varieties. Although both ways amount to the same thing, so long as each individual is appropriately named, and accurately defined; and each located in the most natural manner; so that the little link it forms, may best adorn the general chain.

macra. A. (lean.) *Suppl. pl. succ.* 195.
10. Obs. Florebat apud Kew in regio horto Junio
* 1820. *Flores* spicati more Aloïum, at in foliorum axillis superiorum. *Scapus* pedalis adscendens sive patulus, florum spica subbrevi subpauciflora. *Corollæ* pendulæ breves cylindraceæ rectæ subsemiunciales luteo-rubræ; ore laciniisve patulis ut in variis. *Genitalia* inclusa. *Capsulam* abbreviatam non rectim vel perfectam vidi. In habitu parum simulat genus Phyllomam.

Obs. There still exists great difficulty in understanding the mitre-shaped *Aloës*, of which the following definitions may perhaps be useful.

A. (upright many-toothed) foliis erectis latè ovatis acutis, spinis marginalibus numerosis albis. *nobilis.* 11. *
Nob. in Syn. succ. 78.
Obs. Distinguitur facilè dentibus longioribus et duplo numerosioribus quam in affinibus.

A. (upright distant-toothed) foliis erectis ovatis acuminatis, spinis marginalibus paucioribus albis. *Commelini.* 12.
Al. Commelini. Salm. d'Al. 32.
β *mitræformis* (upright yellowish-toothed); foliis erectis ovatis acuminatis, spinis marginalibus paucioribus flavicantibus.
A. mitræformis. Nob. in Linn. tr. 7. *p.* 23.
Obs. Var. α in juventute solum vidi: a Principe de Salm Dyck.

A. (open Mitre) foliis patulis late-ovatis acutis præcrassis, spinis marginalibus paucioribus flaveolis. *mitræformis.* 13.
Al. mitræformis. Salm. d'Al. p. 33.
A Principe de Salm Dyck sub hoc nomine accepi. A prioribus differt foliis magis patulis &c.

A. (small Mitre) foliis erecto-patulis remotioribus ovatis acutis; spinis marginalibus paucis majoribus flavis. *distans.* 14. *
Al. distans. Nob. in Syn. succ. 78. *&c.—A. brevifolia α, distans. Salm. d'Aloë, p.* 33.
γ *depressa* (pale-spined small Mitre); foliis confertis patentibus caule humiliore, spinis pallidioribus.
A. brevifolia γ, depressa. Salm. d'Al. p. 33.
Obs. Illust. Pr. de Salm Dyck habet alteram varietatem, quam non vidi, viz.

β *reflexa*; foliis remotis oblongo-acutis, reflexis. *Salm. d'Al. l. c.*

Obs. At the present termination of this genus, the author avails himself of the opportunity of making a few remarks concerning the dubious species of his Appendix in *vol. 7. of Linn. tr. p.* 25. *&c.*—The first species given by the name of *A. anomala*, on the authority only of the poor figure there cited, he thinks is merely a bad representation of *recurva*, better delineated in *Bot. mag.* 1353, though from a juvenile plant. But he cannot agree with *Bot. mag.* in citing *A. tricolor* of the same page of the same Appendix, for the same thing; but rather agrees with his illustrious correspondent, the Prince de Salm Dyck, in believing this plant (*A. tricolor, Linn. tr. v.* 7. 25.) to be distinct, and with him (*in Catal. rais. d'Aloë*) adopts Lamarck's specific name of *venosa* for it. But it belongs to the genus *Haworthia*, and is figured in *Comm. prælud.* 29; and also in *Weinm. phyt. t.* 71. *a*; according to *Bot. mag.* (in loco). But the last figure the present writer has not examined.

The third species (*pertusa*) of the said Appendix is described above, in the present work, under the name of *Turgosea pertusa.*

The fourth species (*muricata*) is probably a bad representation of *A. ferox. Bot. mag.* 1975.

The fifth species (*ramosa*) is most likely *A. purpurascens.*

The sixth (*punctata*), which is the most extraordinary, and perhaps the worst figured of all, may be nothing more than a miserable cut of *A. variegata*, better given in *Pet. gaz.* 88. 1.

The seventh (*horrida*) is *A. ferox.*
The eighth (*rhodocantha*) is *A. glauca minor* of *Syn. succ.* 79.
And the ninth and last (*dorsalis*) may be a distinct species allied to *barbadensis*, or *lineata ;* but unknown at present in our gardens. It is *A. vera, costa spinosa, Munting. aloid.* 21, *cum icone* 23 : and seems not only a distinct species, but may even, with *A. barbadensis* and its close allies, form a new genus with yellow flowers ; or rather, they are the only true Aloës : but I have not been able to procure flowers for dissection. This article may be described as follows, and is (as Munting thought it) a very beautiful plant.

A. (keel-spined) foliis ensiformi-triquetris maculatis, margine carinaque altè spinosis.—Can it be a variety of *A. lineata* ? *dorsalis.* 15. *

RHIPIDODENDRUM. *Willd. in* opere quod non vidi. *Aloë Aliorum.*

R. (the Fan.) *plicatile.*
A. plicatilis Aliorum. 1.
β major ; caule longè robustiore, foliisque duplo triplove longioribus latioribusque, serraturis marginalibus asperioribus.
A. plicatilis major. Salm. d'Al. p. 30.
Introduced by the Chevalier Parmentier in 1820 and 1821. A large and stately variety, raised, as M. Parmentier assures me, from native Cape seeds.

GASTERIA. *Duval.* Aloë *Aliorum.*

Calyx petaloideus, curvus obclavatus, basi stamini-fer. *Capsula* parum costata. *Fruticuli vix caulescentes, foliis Aloïum*; floribus pendulis.
Duval Plantæ succulentæ in horto Alençonio, A. D. 1809. *p.* 6.
Obs. Scapi semper remotè spathaceo-bracteolati.

mollis. 1. * G. (soft muddy-leaved) foliis exactè distichis brevibus linguæformibus obtusis cuspidatis farctis molliusculis lævibus sordide viridibus sub-maculatis: margine sæpe asperiusculo.
Habitat C. B. S.
Vigebat in regio horto Kewense A. D. 1819. G. H. ♃.
Flores non vidi.
Forte affinis G. brevifoliæ vel nigricanti.

candicans. 2. * G. (rough marbled-white) foliis exactè distichis ensato-linguæformibus macris, glabris; subtus verrucoso-asperiusculis, verrucis cartilagineis albis in unam subconfluentibus.
Florebat in regio horto Kewense A.D. 1821, Julio mense, e C. B. S.
Acaulis, foliis pedalibus, subtus candicantibus, per verrucas numerosissimas confluentes. Foliorum margines albo-cartilaginei, viridi parum interrupti. *Corollæ* sesquiunciales toto rubræ. Formosa bonaque species. Ab A. nitida *Salm.* et *acinacifolia Jacq.* discrepat in angulorum absentia; a cæteris contiguis longâ corollâ.
Obs. This species will probably arrange near *A. pseudo-nigricans* of the Prince de Salm Dyck,

in his *Enumeraiio aloës curviflorœ* ; at least if the flowers of that plant are long. These, however, I now find (on turning to his description), have an ample short green tube (" tubo amplo brevi viridi"), which in my new arrangement will not admit the present *G. candicans* even into the same section with *pseudo-nigricans* ; my sections being

1. BREVIFLORÆ.
2. MEDIOCRES.
3. LONGIFLORÆ.

OBS. The writer hopes soon to understand the *Gasteriæ* better : for the abovementioned illustrious botanist has lately, with his usual suavity, and unabating love of our charming science, communicated to him the following *Gasteriæ*, which he never before was able to cultivate :— viz. *G. trigona, α elongata, β obtusa.—G. nitida, α parvipunctata, β grandipunctata.—G. glabra, β minor.—G. subcarinata*, and var. *β striata.* — *G. angustifolia*, var. *β lævis.—G. conspurcata.* — *G. obtusifolia.* — *G. nigricans*, var. *β crassifolia*, et var. *γ fasciata.* — *G. pseudo-nigricans*, and a smooth var. of it.— *G. subverrucosa, α grandipunctata*, and *β parvipunctata.* — *G. intermedia, β asperrima.* — *G. verrucosa, β latifolia* ; and *G. nigricans*, var. *marmorata.*

Some of the above are amongst the most remarkable and extraordinary of the Gasterian family, and even some of the varieties are neither less beautiful, nor less interesting, than those which the Prince has published as distinct species.

Accepi a Principe de Salm Dyck A.D. 1821.

acinacifolia. 3. G. (long sword-leaved) acaulis, foliis spiraliter distichis uno-latere truncatis longissimis acinaciformibus supra concaviusculis, apice attenuatis acutis glaberrimis nitidis læte viridibus, maculis distinctis subfasciatim dispositis, angulis interrupte cartilagineis denticulatis. *Pr. de Salm dyck. Gast. enum. p.* 44. 3.

β *nitens*; foliis adultis oblique bi-multifariis inæquilateraliter triquetris ensato-linguæformibus longissimis subnitentibus viridibus; albo confluenter maculatis: marginibus tuberculato-cartilagineis asperiusculis.

Gasteria nitens. Nob. in Suppl. succ. 48.

Planta junior.

Obs. Fere eadem cum G. acinacifolia. *Folia* sesquipedalia, altè viridia, obtusè carinatim inæquilateraliter triquetra. *Flores* sesquiunciales, longiores omnium mihi notatorum, forteque minus incurvæ. Adulta maximè a juniore discrepat.

repens. 4. G. (creeping-rooted) foliis ensato-linguæformibus albo-verruculosis: radice repente sobolifera.

* Parvam plantam solum in regio horto Kewense vidi, a Domino Hitchin missam, A. D. 1821. Facies fortasse G. intermediæ; ejusque forte varietas minor.

HAWORTHIA. *Duval.* Aloë *Linn.* &c.

Calyx petaloideus, rectus, supernè revolutus in duo labia, basi staminifer. *Capsula* in costas valdè prominens. *Fruticuli vix caulescentes, foliis Aloïum, floribus erectis. Duval. Plantæ succ. in Horto alençonio. A.D.* 1809. *p.* 7.

* Trifariæ, foliis trifariis minimis induratissimis asperis atro-viridibus, scapis caulibusve fere capillaribus rigidis simplicibus, infra flores sine bracteolis.

H. *Syn. pl. succ. p.* 90. *&c.* *viscosa.*
Obs. Of this well known species there are at Kew, 1.
and I think in other collections, what appear to be three varieties, unless casualties only have occasioned the appearances they assume, viz.

α *major;* foliis sæpius remotioribus quam in sequente varietate.

β *minor;* foliis confertioribus et fortè minus crassis, junioribus magis erectis et acuminatioribus.

γ *parvifolia;* fere duplo angustior; foliis duplo minoribus densiusque imbricantibus.

H. (hard, branchy, triangular) ramulosa: foliis *indura-*
trifariis patulis compresso-cavis cordato-acumi- *ta.*
natis asperis atro-viridibus induratissimis; se- 2.
nectis recurvo-expansis unisulcatis crassiori- *
bus.

Benevolè misit amicus Dom. Aiton, A.D. 1820.

Habitat C. B. S.

H. viscosæ affinis, at foliis magis patulis minus macris. Affinior forte ad Aloën pseudo-tortuosam *Salm d'Al. p.* 8, quam non satis vidi.

Huic sectioni referendæ H. cordifolia, concinna, et asperiuscula. *Nob.*

** Rigidæ, foliis spiraliter 3-multifariis parvis induratis asperiusculis atroviridibus, scapis caulibusve filiformibus.

H. (great rigid.) *rigida.*
A. rigida. Pl. gr. t. 62. 3.

Obs. Affinis certè H. expansæ, *Nob.* at alia, foliis duplo majoribus, longioribus, &c.

Flores non vidi.

Viventem nuper communicavit illust. Pr. de Salm Dyck. In ejus familia species insignis.

Huc etiam referendæ H. tortuosa, et expansa *Nobis;* quoque Aloë pseudo-rigida. *Salm d' Al. p.* 9.

Obs. *H. curta* and *H. tortella* of *Suppl. pl. succ. p.* 60-1, appear now to be slight young seedling varieties only of *H. tortuosa Nob.* And it is probable that *A. pseudo-tortuosa* of the Prince de Salm Dyck may not prove a distinct species; but as yet I have only seen one young plant, which nevertheless leads me to doubt about his *tortuosa*, and its variety *β*.

A little difference in soil, culture and age, often makes a great one in the face and appearances of succulent plants; and it requires no less than the judgment of consummate skill, and unwearied attention, to decide on every occasion with *complete* success. And more especially from those who cannot keep alive, and in perfect health, a good collection of their own; whose flowers it requires no favour to dissect, and carry away, for further study.

*** Luridæ: foliis multifariis mediocribus luridè-viridibus lividisve; supernè erecto-patulis sæpe recurvis induratisque; margine infraque tuberculato-asperis scabris vel rugosis, tuberculis luridis confluentibus: scapo simplice filiformi.

H. (bastard pearl) foliis ovato-lanceolatis, junioribus patulis, supra convexulis rugosis, subtus tuberculatis, tuberculis parvis viridibus. *hybrida.* 4.
A. hybrida. Salm d'Al. p. 7.
Communicavit ipse Princeps A. D. 1821. Species singularis.

H. (rugged) foliis semicylindricis induratissimis; supernè auctis s. incrassatis triquetris, extus tuberculato-scaberrimis intus scabris; basi lævibus. *Nob. in Suppl. pl. succ.* 58. *scabra.* 5. *
Flores non vidi.

H. (sordid) foliis erecto-patulis apice subrecurvantibus luride viridibus superne carinatis: subtus carina margineque scabriusculis. *sordida.* 6. *
Viget in regio horto Kewense, e C. B.S. At parvam imperfectamque plantam solum vidi, foliis oblongo-acuminatis subulatisve, at supra concavis mucrone parvo terminali.

H. (recurved) foliis recurvis semiteretibus ovato-longe attenuatis subulatisve: supra lævibus, margine tuberculatim subelevato-serrulato: subtus scabris e tuberculis parvis crebris viridibus. *Nob. in Syn. succ.* 91. *recurva.* 7. *
Obs. Folia plerumque spiraliter bi-multifaria e viridi sordidè purpurascentia lividave.

H. (veined) foliis mucronatis patenti-reflexis lævibus, supra planis, venis satis conspicuis, subtus convexis, margine denticulato. *venosa.* 8. *
A. venosa. Lam. dict. encycl. no. 16.—*A. &c. Com. prælud.* 80. *p.* 29.—*A. tricolor. Nob. in Linn. tr. v.* 7. *p.* 25.
Non vidi.

*** Albicantes: Acaules: foliis ambicenter multifariis rigidis lævibus sæpius albicantibus apice carinatis: marginibus carinaque cartilagineis; scapo ramoso.

albicans. 9. * H. (bordered white) simplex scapo ramoso: foliis ovato-acuminatis albidis lævibus, margine carinaque valide cartilagineis. *Nob. in Syn. succ. &c.* 91.—*Bot. mag. icone.*—*Comm. prælud.* 30.—*Rariores* 48.

lævis. 10. * H. (narrow bordered white) simplex: scapo (Commelini fide) simplice; foliis ovato longè acuminatis cuspidatis albidis lævibus tenuiter albo marginatis.

Aloë &c. Comm. hort. amst. 2. *t.* 7.

Habitat C. B. S.

Vigebat in regio horto Kewense, cum sequente, A. D. 1820.

ramifera. 11. * H. (branching white) caudice infernè supra terram ramuloso, foliis ovato-acuminatis albidis tuberculis paucis sparsis albicantibus.

Habitat C. B. S.

Obs. Hæce ultimæ tres lævigatæ sorores sunt simillimæ uti ovum ovo. Sed facillimè distinguuntur: prima caudice simplice et margine cartilagineo crasso—secunda cartilagine fere nullo, caudice simplice, et foliis longius productim acuminatis; tertiaque caudice ramoso; necnon sæpe foliis parcè tuberculatis tuberculis lucidis.

virescens. 12. * H. (bordered green) simplex subimmarginata: foliis ovato-acuminatis virescentibus, tuberculis paucissimis albis sparsis lucidis.

Viget in regio horto Kewense, a C. B. S. cum var. sequente.

β *minor;* duplo minor, glaucò-viridis. Fortasse propria species.

Parum approximat habitu ad Apicram spiralem. *Nob.*

**** Margaritiferæ, foliis rigidis ambienter multifariis, plus minus tuberculato-margaritaceis : scapo ramoso, infra flores nudo.

Obs. Sectio difficilis. H. margaritifera gaudet in papillis niveis convexis. H. papillosa habet papillas truncatas apice subconcavas in utraque pagina. H. semimargaritifera etiam gerit truncatas papillas sæpe ad lucem viridi-albo mutabiliter variabiles ; et præcipuè subtus impositas.

H. (chequered pearl) foliis multifariis erecto-incurvis coarctatim imbricantibus lævibus ; subtus margaritis minutis distinctis longitudinaliter transverseque fasciatim dispositis. *Reinwardti.* 13.

Aloë Reinwardti. Salm obs. bot. 37.—*H. fasciata. Nob. in Suppl. succ.* 57, synonymo excluso.

Obs. This plant, sent to me by the Chevalier Van Marum, by the name of *A. fasciata*, appears to be distinct from that species ; which is my var. β major. *Suppl. pl. succ. l. c.*

Huic sectioni referendæ cæteræ margaritaceæ, exceptis H. scabra, hybrida, recurva, et venosa, quæ Sectionem distinctam constituunt.

fasciata. H. (transverse barred.)
14. *Aloë fasciata. Salm catal. rais. d'Al. p. 5.—H. fasciata β. Nob. in Suppl. pl. succ. p.* 59, excluso synonymo.
β *major;* foliis multo latioribus et longioribus, supra glabris, subtus papillosis, papillis minoribus et minus regulariter in fascias transversales confluentibus. *Salm cat. rais. d'Al.* 5.
A præcedente (H. attenuata) imprimis differt foliis supra lævibus (et nitidis). *Salm l. c.*
Unum viventem folium, var. β, a Principe de Salm Dyck, solum vidi.

attenuata. H. (chalky pearl.) *Nob. in Syn. succ.* 92.
15. * Obs. Minimam sobolem varietatis hujus speciei misit amicus Dom. Hitchin, at periit. An eadem cum ulla varietate H. radulæ, nescio.

radula. H. (raspy pearl.)
16. *Aloë radula. Jacq. hort. schœnb. cum icone.—H. radula. Nob. in Syn. succ.* 93.
α *lævior. Princeps de Salm Dyck in Litt. et radula major, ejus Catal. rais. d'Al.* 4.
β *pluriperlata;* baccis minutissimis numerosissimis.
A. radula media. Salm. l. c.—A. radula. Jacq. schœn. cum icone, et Nob. l. c.
γ *asperior. Princeps de Salm Dyck in Litt. et Al. radula minor, ejus in Catal. rais. d'Al.* 4.
δ *magniperlata;* baccis longe majoribus.
"*Al. radula margaritacea.* [olim semimargaritifera, minima"] *Princeps de Salm dyck in Litt. A.D.* 1821.
Obs. An hujus speciei? Parvam plantam δ, et folium unum viventem α, minutamque sobolem γ, a Principe de Salm Dyck solum vidi.

H. (great erect pearl) externè sobolifera: foliis stricto-patulis subquadripollicaribus longè ovato-acuminatis, tuberculis margaritaceis, majoribus. *Nob. in Suppl. pl. succ.* 56. *erecta.* 17. *

Obs. H. margaritiferæ *Nob.* simillima, et fere eadem magnitudine, foliis parum angustioribus; sed discrepat per soboles numerosas parvas externas basin versus, ut in H. granata, a qua quoque longe differt in statura et margaritis.

Flores non vidi.

H. (long warted.) *Nob. in Suppl. succ.* 58.—*Al. papillosa. Salm cat. rais. d'Al.* 7, papillis undique ornatis. *papillosa.* 18.

β semipapillosa; foliis supra lævibus sordide viridibus. Folium viventem misit amicus Dom. Hitchin.

***** Retusæ; sæpe ciliatæ: foliis mediocribus 5-multifariis vix mollibus vixve rigidiusculis, superne plus minus gibboso-retusis et ad solem plus minus pellucidis reticulatisve, scapo simplice.

H. (blunt cushion) foliis 5-fariis apice retuso-deltoideis obtusiusculis muticis: supra sublineatis. *mutica.* 19. *

Viget in regio horto Kewense e C. B. S.

H. retusæ simillima ut ovum ovo, at forte pallidior, durior, turgidior; foliis obtusioribus apice sine mucrone; minus regulariter retusis, lineis magis anastomosantibus.

Huc referendæ H. retusa, mirabilis, turgida, et læte-virens, *Nob.*

****** Arachnoideæ, foliis ambienter multifariis mollibus, lævibus: sæpissime plus minus marginibus carinisque denticulato-ciliatis.

setata. 20. * H. (the bristle-edged) foliis lorato-lanceolatis acuminatis setaque longa finientibus, marginibus carinaque ciliatim membranaceo-setatis. *Nob. in suppl. succ.* 52.

α, foliis planis viridibus, setis niveis tenuissimis numerosis.

β *nigricans*; foliis planis laride atro-virentibus, setis tenuissimis niveis numerosis.

γ *media*; foliis turgidis pallide viridibus utroque convexulis, ciliisque niveis duplo majoribus duploque paucioribus.

δ *major*; foliis pallide viridibus utraque convexulis ciliisque niveis triplo majoribus quam α s. β, et duplo paucioribus. Omnium varietatum major, et forte cum γ propria species.

H. arachnoides β. *Nob. in Suppl. pl. succ.* 52.

Obs. Folia in omnibus varietatibus opaca minora angustiora turgidiora saturatiora; cum longioribus et elegantioribus setis quam in H. arachnoïde. Præterea, setæ carinales in 2-3 ordinibus sæpe dispositæ.

pallida. 21. * H. (the pale-green) foliis subglaucescentibus margine carinaque membranaceo-setulatis, asperisve.

Habitat C. B. S.

Nuper communicavit amicus Dom. Aiton, e regio horto Kewense.

Obs. Priore duplo minor, longeque minus setata. Sequentem magis approximat, at longe palli-

dior spinulosior, foliis planioribus, nullo modo turgidis farctisve; sed ad lucem aliquantillum subpellucenter guttatis, subtuberculatisque.

H. (the dark-green) foliis atro-viridibus supra valde turgidis, setulis marginalibus exiguis, tuberculisque undique numerosis. *atrovirens.* 22.

Aloë atrovirens. Plant. grass.—A. pumila Milleri, Nobisque in Synops. succ. &c. 95.

Obs. Nomen atrovirens longissimè melius.

H. (green-toothed) foliis erecto-recurvis lorato-subulatis acuminatis atro-virentibus, margine carinaque denticulatis; denticulis parvis viridibus numerosis quandoque geminatis. *chlorocantha.* 23. *

Vigebat in regio horto Kewense A. D. 1820, e C. B. S.

Obs. H. atrovirenti affinis, at foliis multò longioribus, longèque planioribus: supernè carinatis, cuspide setoso parvo finiente: infernè ad lucem lineatis.

Huc quoque referendæ H. arachnoides et translucens.

******* Reticulatæ: foliis ambienter rosaceove multifariis, mollibus lævibus læte viridibus integris, obsoleteve denticulatis; sæpe mucronato-aristatis; superne ad lucem pellucidis, reticulatisque: scapo simplice.

H. (pale, netted.) *Nob. in Syn. succ.* 94. *reticulata.* 24. *

concava. 25. * H. (hollow-leaved) foliis excavato cymbiformibus obtusis glaucis valde concavis : superne carinatis obsolete reticulatis : propaginibus cespitosis.
β. foliis erectioribus. A Dom. Hitchin.
H. cymbiformis. Nob. in Syn. succ. 94.
As this is the only concave-leaved species in this difficult Section, and as that of *cymbiformis* has been objected to, the change of its name needs but little apology.

mucronata. 26. * H. (membrane-pointed.) *Nob. in Suppl. pl. succ. p.* 50.

limpida. 27. * H. (limpid.) *Nob. in Suppl. pl. succ. p.* 51.

aristata. 28. * H. (long pin-pointed) foliis atro-viridibus ovato-longe subulatim attenuatis filoque semiunciali finientibus, sublineatis. *Nob. in Suppl. pl. succ. p.* 51.

cuspidata. 29. * H, (shouldering pin-pointed) foliis viridibus obovato-oblongis loratisve acuminatis aristaque finientibus, parce ciliato-serrulatis apice pellucentibus reticulatisve.
H. cuspidata. Nob. in Suppl. succ. p. 51.
Obs. Folia superne carinâ aliquot denticulatâ.

denticulata. 30. * H. (pale, pin-pointed) foliis pallide viridibus ad lucem subreticulatis : carinula marginibusque minutissime albo-denticulatis, aristatis.
Cum prioribus viget in regio horto Kewense, e C. B. S.
Obs. Priore pallidior, magis reticulata arista breviore.

DECANDRIA. MONOGYNIA.

ZYGOPHYLLUM. *Linn. &c.*

Z. (broad-leaved) foliis conjugatis subsessilibus late *capense.*
elliptícis, externe basi oblique inæqualibus; sti- 1.
pulis duabus brevibus triangularibus aduncis pe-
tiolo alternantibus: caulibus fruticosis subde-
cumbentibus.

Zygophyllum capense. Pers. syn. 1. 463?

OBS. *Folia* conjugata, cum mucronulo centrali terminali: foliolis 12-18-linearibus.

Viget in regio horto Kewense.

Flores non vidi.

DODECANDRIA. MONOGYNIA.

PORTULACA. *Linn. &c.*

P. (leafy-flowered) floribus terminalibus solitariis *involu-*
involucro magno inæquali heptaphyllo circum- *crata.*
cinctis. 1.

OBS. Vidi florentem in regio horto Kewense Sept. *
1819. St. ♃. s. ♄. Patriam nescio.

Herba, s. Suffrutex exiguus semipedalis, ramis effusis. *Ramulum* siccatum solum habeo 3-entalem foliosum, et unum adultum folium lanceolatum 2-uncialem.

Habitus fere P. pilosæ at triplo major, folii- reme-

tioribus, fasciculisque pilorum axillarium longioribus albidioribus. *Flores* foliolis (involucri more) sub-7, et 6-12 lineas longis (cum eorum pilis axillaribus) suffulti.

Ob habitum, præcipueque pilos axillares s. intrafoliaceas stipulas, forte cum P. pilosa, et setacea, *Nob. in Misc. nat.* 139, genus proprium; at non rectim examinavi.

Descriptio ex sicco parvo exemplari supra notato.

RÜLINGIA. *Ehrhart. beit. et Nob. in Syn. succ. p.* 124.

angustifolia. 1. * R. (narrow-leaved) foliis uniformiter farctim angustè lineari-lanceolatis expansis: cauliculo brevi ramuloso.

E regio horto Kewense, a Capensibus seminibus orta, ante 1819. St. ♄.

Obs. R. lanceolatæ proxima, at minor, et differt cauliculo magis elevato ramoso nunc bipollicari: et ab R. variante quoque discrepat uniformibus foliis minoribus, minusque incrassatis angustioribus.

rufescens. 2. * R. (the great red) foliis confertis expansis recurvisque, ovato-acutis subacuminatisve, crassis viridibus; infra sæpissimè atro-purpureis. *Nob. in Suppl. pl. succ.* 64.

Obs. Omnium cognitarum major. Facies inter R. anacampserotem et rubentem. *Folia* ima magna: alia juniora non duplo majora quam in R. rubente. *Flores* ut in R. anacampserote.

β. foliis semper fere viridibus.

R. (many-leaved.) *Nob. in Suppl. pl. succ.* 65. *poly-*
et figurata est in Pluk. phyt. 41. 6. *phylla.*
3.
*

DODECANDRIA. Trigynia.

CREPIDARIA. *Nob. in Syn. succ.* 136.

C. (small keeled) foliis ovatis acuminato-obtusulis, *subcari-*
supra obsolete venosis, subtus lente pubescenti- *nata.*
bus : costa carinulata. 1.
Florebat in regio horto Kewense Jun. 1820. *
St. ♄. Patriam nescio.
C. carinatæ simillima, at alia, minusque carinata.

TITHYMALUS. *Tournef. Nob. in Syn. succ. pl.* 137.

* Tuberosi.

T. (Catchfly-leaved) foliis lanceolatis obtusis viri- *Silenifo-*
dibus inflexo-subcanaliculatis: radice magno *lius.*
tuberoso protuberante. 1.
Vigebat cum sequente in regio horto Kewense e *
C. B. S. 1821.
Radix senecta infra et supra terram tuberosa. *Flores* bis involucrati. *Folia* sæpe retusa, emarginatave : radice esquamata. Petioli longi altè canaliculati.
β. foliis glaucioribus, latioribus.

T. (curled) foliis lanceolatis viridibus, margine *crispus.*
crispis, petiolis canaliculatis; radice tuberosa 2.
esquamata. *

E C. B. S.
Flores 1. s. 2. involucrati.
Obs. Incompletam plantam hujus et præcedentis solum vidi.

tuberosus. T. (oblong heart-leaved.) *Burm. afr.* 9. *t.* 4.—*Syn. succ.* 137.
3. Præcedentibus similis, at valde distinctus.

DODECANDRIA. Dodecagynia.

SEMPERVIVUM. *Linn. &c.*

Calyx 7-12-partitus. *Petala* 7-12. *Capsulæ* totidem 7-12. *Glandula* minutissima quadrata squamulæformis ad basin singuli germinis externè.

Specierum conspectus.

* Grandifolia: *Calyx* sub-12-partitus. *Petala* sub-12. *Capsulæque* totidem 12. *Germinum glandulæ* minutissimæ squamulæformes, sæpius quadratæ albæ, quandoque subretusæ. *Folia* spathulata maxima in rosulis terminalia. *Caules* succulenti frutescentes parum ramosi simplicesve, 1-6-pedales. *Habitant* præcipue in Canariis et Madeira, (unum in Europa australi ?) sine dubio scopulosis, aridisve.

S. (great villous.) *Pl. gr. t.* 141. *canariense.* 1.

S. (great clammy.) *Bot. reg.* 278. *glutinosum.* 2.

S. (hispid stemmed.) *Bot. mag.* 1980. *Smithii.* 3.
Obs. The petals are pale yellow and linear-lanceor lance-shaped. The glands of the germen are entirely wanting. This is the only hispid-stemmed species; whence I had named it *hispicaule*, before its publication in the *Bot. mag.*

S. (chalice-formed.) *Nob. in Suppl. pl. succ.* 69. *caliciforme.* 4. *
Species insignis, omnium lævigatior. Folia sublonga erecta albo-marginata retusa, apice recurva.
Sempervivum aureum. Cat. hort. dyck. 35.
β *spurium*; varietas seminalis, inter hunc et forte S. glutinosum, exstat in *Hort. chels.*—Aliam varietatem etiam vidi.

S. (tree Houseleek.) *Bot. mag.* 99. *arboreum.* 5.
Germinis glandulæ emarginatæ secundum figuram citatam.
β *variegatum*; foliis eleganter et pallide luteo variegatis.
γ *atropurpureum*; foliis atropurpureis. *Cat. hort. dyck. Plantæ succ.* 35.
Communicavit illust. Pr. de Salm Dyck.

S. (table-shaped.) *Nob. in Suppl. pl. succ.* 69.—*Pluk. phyt.* 314. 1? *tabulæforme.* 6. *
Obs. Planta præsingularis. *Caudex* simplex subsemipedalis. *Folia* florendi tempore omnino marcescentia persistentia; centralia sensim sen-

simque minora vel bracteosa, elevataque cum scapo magno paniculato demum subbipedali, magnis et expansis ramis apicem versus subconfertifloris, more affinium. *Calyx* sub-12-fidus. *Petala* 10-12-lineari-lanceolata pallidissima subsulphurea. *Stamina* sub 20. *Styli* sub 10. *Germinum* glandulæ minutæ pedunculatæ, globoso-limpidæ instar Helicis cornua, at longissime breviores!

Post florescentiam in tertio quartove anno periit.

ciliare. S. (latchet-leaved.) *Bot. mag.* 1978.

7. Obs. We had fancied from the habit of this plant when young, it was closely allied to our *Cotyledon cespitosa* (*Suppl. succ. p.* 70.), but it proves otherwise. *S. ciliare* by age acquires a considerable stem. Prior to the figure in *Bot. mag.* we had named this species *S. ligulare.*

β *hybridum*; foliis ligulato-spatuliformibus subcartilagineo-crenulatis, crenulis albis pellucidis, oculo nudo vix manifestis; ad lentem lucemque globosis limpidis, in ordine pulchro confertissimis.

Vigebat in horto amici Dom. Law A. D. 1820, ortum e seminibus α, sine dubio impregnatis cum alio, forteque Sempervivo lineolare, *Nob.*

Apparet aliam longè ab omnibus. *Folia* infernè lineolata, lineolis latiusculis sparsis purpurascentibus. Per ætatem, caulem ramosum acquirit dodrantalem, duplo altiorem quam α.

Sempervivi species facillimè inter hybridas coeunt in hortis.

** Parvifolia: *Calyx* sub-7-partitus. *Petala* sub 7: *Capsulæque* totidem 7. *Germinum* glandulæ mi-

nutæ subcuneatæ fimbriatæ aurantiæ basi albæ. *Folia* magis laxè in rosulas collecta quam in prioribus. *Caules* humiliores magis ramosi, suffrutescentes, vel in uno annui, sæpius semipedales, valdè floriferi. *Habitant* in Canariis et Madeira, unumque annuum forte in monte Baldo, sed vix. An genus proprium?

S. (small lineolate.) *Nob. in Supp. pl. succ.* 69. *lineolare.* 8. *
Obs. *Folia* sæpe in rosulas terminalia subspatulata nuda margine tenuissime subcartilaginea oculo nudo integra; subtus parcè sparsèque lineolata, lineolis sæpius purpurascentibus.

S. (gland-edged.) *Willd. sp. pl.* 2. *p.* 931. *glandulosum.* 9.
Germinum glandulæ fimbriatæ, luteæ, petalis concolores.

S. (large villose.) *laxum.* 10. *
There is a seedling plant in Chelsea garden under this name, from Mr. Otto, of the Royal gardens at Berlin. For a further account of it see the end of this work. It resembles *S. villosum*, but will probably be larger, and with some of its leaves at present rather of an ovato-rhombeous form, and long petioled.

S. (small shrubby villous.) *Willd. sp. pl.* 2. *p.* 933. *villosum.* 11.
β. paululum majus.
Communicavit amicus Dom. Jos. Hooker 1820, cum variis aliis.
Germinum glandulæ fimbriatæ, aurantiæ.

stellatum. 12. S. (small annual villous.) *Smith in Linn. soc. lond. tr. v.* 1. 251.—*S. villosum. Sims in Bot. mag.* 1809.

The figure represents a forced and weakly uncharacteristic plant.

HABITAT in Madeira, secundum *Bot. mag. l. c.*

Vix in M. Baldo.

Priori simillimum, at omnino distinctum, radice annua et hirsutie &c. A semine non variat.

tortuosum. 13. S. (twisted.) *Willd. sp. pl.* 2. *p.* 933.—*Bot. mag.* 296.

OBS. This plant is more dense and twisted in the branches, and more gibbous and crowded-leaved than the fig. above cited; which represents a rather forced and uncharacteristic plant.

*** ACAULIA, scapigera; *foliis* radicalibus ciliatis, in rosulas semper copiosè densissimeque collectis. *Calyx, Petala, &c.* fere ut in prima Sectione. *Folia* sæpius obcuneato-spatulata.

tectorum. 14. S. (common Houseleek.) *Engl. bot.* 1320.

Nectaria (secundum *Hort. kew. ed.* 2. *vol.* 3. *p.* 172.) cuneiformia, carunculata! Non examinavi.

grandiflorum. 15. S. (great-flowered Houseleek) pubescens: stolonibus flagelliformibus: petalis sub-15-lineari-lanceolatis elongatis.

S. globiferum. Bot. mag. 507 *et* 2115. *Nec Aliorum.*

S. (whip-lash) pubescens: stolonibus flagelliformis: petalis . . . . . . *flagelliforme.*
Vidi in regio horto Kewense A.D. 1820, sine flore. 16.
Priore nunc minus, at forte omnino idem.
Flores docebunt.

S. (hairy, fringe-petaled.) *Willd. sp. pl.* 2. *p.* 934. *hirtum.*
Ultimo affine. 17.
Flores non vidi.
Dignoscitur petalis fimbriatis. *Schmid.* 17. 1.

S. (mountain red-flowered.) *Willd. sp. pl.* 2. *p.* 933. *montanum.*
Germinum glandulæ quadratæ retusæ. 18.

S. (hen and chicken Houseleek) foliis ciliatis, stolonibus tenuioribus brevibus globuliferis, globulis confertis decidentibus; quasi sessilibus; petalis senis viridi-pallescentibus fimbriatis. *globiferum.* 19.
S. *globiferum. Linn. sp. pl.* 1. 665.—*Mill. dic. ed.* 8. 2.—*Sedum &c. globulis decidentibus. Moris. hist.* 3. *p.* 472. *et sect.* 12. *t.* 7. *f.* 18, cum petalis erroneis. — *S. soboliferum. Bot. magaz.* 1457.—Hen and Chicken Houseleek of all gardeners.
Obs. Until the publication of the 1475th fig. of the *Bot. mag.* we had ever known this plant as the *S. globiferum* of *Linn.* and *Miller.* Misled by that figure, we followed the error soon after in *Syn. succ. p.* 169, and have not until now been able to rectify it without specimens; and by aid of the above cited works alone. The plant is very distinct from *hirtum,* notwithstanding the doubt expressed in *Bot. mag.* 1457, and by no means the nearest allied to that species.

arachnoideum. 20. S. (cobweb Houseleek.) *Bot. mag.* 68.
Obs. Germinis glandulæ quadratæ retusæ.

cuspidatum. 21. * S. (pin-pointed.) *Nob. in Misc. nat.* 186.—*Syn. succ.* 171.—*Crassula spinosa. Willd. sp. pl.* 1. *p.* 1554. — *Crassula &c. Gmel. fl. sib. t.* 67. *f.* 2?
Præsingularis species. Nullo vere affine: floribus rarissimis.

africanum. 22. S. (african) foliorum marginibus serrato-dentatis, propaginibus patulis. *Mill. dic. ed.* 8. *no.* 7.
Non vidi.

MONANTHES. Sempervivum *Linn. &c.*

Germina sub-7, basi externè glandulâ amplâ orbiculato-cochleatâ lente serrulatâ, petalis duplo breviore, 4-plo latiore, rufâ. Cætera fere ut in Sempervivo.

Herba acaulis succulenta, pygmæa polyphylla; foliis parvis clavatis retusis densè imbricatis Sedi more, rufo-viridibus, scapis sæpius 1-5-floris, at ramulosis solum basi.

polyphylla. 1. M. (many-leaved.)
Sempervivum Monanthes. Hort. kew. ed. 1.—*Bot. mag.* 93.
Habitat in Madeira. G. H. ♃.

ICOSANDRIA. Monogynia.

CACTUS. *Linn. et Nob. in Synops. succ. p.* 172.

C. (great-spined) rotundatus, læte-virens, 14-angulatus, costis rectis dense spinosis; spinis fasciculatis longis prægrossis albicantibus apice fusco-roseis, 12 radiantibus, 4 rectis maximis. *Prince de Salm Dyck, in Obs. botan. in Hort. dyck. A.D.* 1820. *macrocanthos.* 1.

Habitat in Americ. calidiore. St. ♄.

Obs. My friend Dr. Hooker, Regius Professor of Botany at Glasgow, showed me a very fine plant of this noble *Cactus*, which he lately procured in Holland. It had been recently sent thither from South America, and, as Dr. H. assured me, had pierced with one of its wonderful roots through a solid piece of the rock its native bed; which still continued to adhere. It wears a cap of down; small, and of cylindric form.

MAMMILLARIA. *Syn. succ.* 177.

M. (the great) simplex clavata, tuberculis ovatis apice spinoso-lanatis, lana spinis rectis breviore. *coronaria.* 1.

Cactus coronarius. Willd. enum. app. 30.

Habitat in America calidiore. St. ♄.

Pulcherrima, caule 5-pedali clavato, diametro pedali. *Willd. l. c.*

In hort. Chels. viget, ab horto Berolinense.

CEREUS. *Miller.—Syn. succ.* 178.

obtusus. 1. * C. (blunt tri-angled) ramis subarticulatis erectis, paucis obtusè triangularibus.

HABITAT....

Vigebat in regio horto Kewense, A. D. 1820. St. ♄.

OBS. Tripedalis, rami 1-unc. crassi: ramorum spinæ paucæ fulvicantes, radiato-patulæ variantes, 1-5-lineares, lanâ fere nullâ. Species valde distincta et facie fere Opuntiæ, at gracilior; et habet axem centralem lignosum Cereorum.

imbricatus. 2. * C. (imbricated) erectus teretiusculus non angulatus superficie porcis sublobulæformibus varie subimbricatim tessellatis.

HABITAT....

INTROD. a Dom. Loddiges 1820, sub hoc nomine. St. ♄.

Species præsingularis distinctissima: at rectè non examinavi. Affinis C. cylindrico, at robustior: sed forte cum illo genus proprium.

niger. 3. * C. (the black) erectus nigricans, spinis numerosis fulvis, demum flavis pallidisve, lana longioribus.

Cactus niger. Catal. hort. dyck. A. D. 1820. St. ♄.

OBS. C. repando proximus, spinis in planta dodrantali sæpe semunciam longis. Dignoscitur instanter cute pullo.

Communicavit illustr. Princeps de Salm Dyck.

OBS. So singular is the colour of this plant, that on its first arrival it was thought to be rotten, even after trying its flesh with the point of a knife; and was even for awhile thrown by as dead!

OPUNTIA. *Miller.—Syn. succ.* 187.

O. (great) articulato-prolifera, articulis ovato-oblongis obtusis, spinis longitudine lanuginis, deciduis. *decumana.* 1.
Cactus decumanus. Willd. enum. suppl. 34.
Habitat in America meridionale.
Introd. 1820.
Viget in hort. Chels. St. ♄.
Articuli sesquipedales, in junioribus tantum *lanugo* et *spinæ* nec *tubercula* ut in C. Ficus-indica. *Willd. l. c.*
Vix Milleri Opuntia maxima ; sed major, at minus crassa. Superlativa nomina mala !

O. (Pinpillow.) *Syn. succ.* 196. *&c.* *curassavica.* 2.
δ *longa* (long Pinpillow) ramis magis firmis duplo longioribus.
Habitat in Brasilia. St. ♄.
Viget in hort. Chels.
A cæteris varietatibus differt in ramis 2-3-plo longioribus, s. articulis remotioribus et minus divaricantibus. Spinæ etiam longiores. In Brasilia legit amicus Dom. Geo. Anderson, nunc inter beatos. Forte propria species.
Flores non vidi.

RHIPSALIS. *Gærtn. &c.*

R. (fig-marygold-like) articulato-prolifer glomerato-ramosus ; ramis erectis teretiusculis imbricantibus brevibus, fasciculis spinularum capillacearum albis, pallidis ; mortuisve nigris. *mesembryanthoides.* 1. *
Rhipsalis salicornoides β. *Nob. in Suppl. pl. succ. p.* 83.

R. salicornoide humilior, ramis numerosioribus brevioribus longissimè confertioribus, spinulis 4-6 longioribus 2-linearibus erectis manifestioribus; at non rectè examinavi.

Flores non vidi.

Obs. *R. salicornoides* has flowered in the noble nursery of Messrs. Loddiges; where hothouse and greenhouse plants are managed in a greater style of magnificence than perhaps any where; and it has been figured in their neat Botanical Cabinet.

grandiflorus. 2. * R. (Calycanthus-flowered) parce ramosus, ramis suberectis subcalamiformibus nudis, spinulis minutissimis solitariis regulariter distantiusculis pallidis arcte adpressis, floribus numerosis vix uncialibus.

Flores (Julio) flos-lactis colore, tubo nullo, petalis imbricatis obtusis, intimis pedetentim majoribus ut in Opuntiis; exterioribus sensim sensimque magis calycinis, obtusioribus magisque spuamulæformibus. *Stamina* numerosa petalis concolora et breviora. *Stylus* albus, *stigmatibus* 4 rotatim expansis sublineam longis stamina paululum superantibus.

Rhipsalis grandiflorus. *Nob. in Suppl. pl. succ. p.* 83.

ICOSANDRIA. Trigynia.

SESUVIUM. *Linn. &c.*

Obs. At the time the author wrote his remarks on this genus, in page 86 of *Suppl. pl. succ.*, con-

tending against the belief of *Bot. mag. p.* 1701, and in favour of three or four rather than one distinct species of *Sesuvium*; he was not aware that the great botanist Willdenow had actually published five species! in the *Enumeratio, v.* 1. *p.* 521; at least two of which are probably specifically different from the presumed four of *Suppl. pl. succ. p.* 86-87.

ICOSANDRIA. PENTAGYNIA.

TETRAGONIA. *Linn. gen. pl.* 859.—*Nob. in Misc. nat.* 117.

T. (linear-leaved) foliis alternis linearibus ad latera subrevolutis, supra linea dorsali exaratis, virescentibus: floribus terminalibus racemosis. *linearis.* 1. *

Vigebat in regio horto Kewense, et florebat Sept. 1819.

HABITAT C. B. S.

Caules fruticulosi erecto-effusi, decumbentes.

T. (obovate-leaved) foliis alternis pruinosis obovatis ovalibusve petiolis alatis amplexicaulibus subdecurrentibus. *obovata.* 2. *

Viget in regio horto Kewense, e C. B. S.

OBS. Simillima T. decumbenti, at duplo major; foliis in petiolos alatos pedetentim attenuatis, et infernè grossè venosis, supremis subrotundis. Ramuli supremi sparsim fere papuloso-pilosuli.

Flores non vidi.

MESEMBRYANTHEMUM. *Gen. pl.* 860. —*Nob. in Syn. succ. &c.* 202.

Calyx 4-5-fidus inæqualis. *Petala* numerosa inæqualiter linearia, basi variè confluentia. *Capsula* infera carnosa 4-multilocularis, loculis singulis stylo finientibus, polyspermis.

Obs. *Folia* semper carnosa, et (linguiformibus veris exceptis) decussata. *Corolla* antemeridiana : diurna : pomeridiana : vespertina : nocturnave.

Obs. Since the publication of the author's *Suppl. plant. succ.*, he had in MS. increased the number of the nominated Sections of the numerous plants of this genus to threescore. And since then, His Highness the Prince de Salm Dyck, in his *Tentamen botanicum*, lately published, has given an improved catalogue of the genus in 35 named Sections (sometimes exactly like the above MS.), and not much unlike those of the writer in *Obs. mesemb. A. D.* 1794, and adopting most of his subsequent ones.

The Prince's *Divisions* and *Sections* are as follows :—

PERENNIA, vel SUBPERENNIA.

1. Cylindracea.
2. Planifolia.

PERENNIA.

Acaulia vel Subacaulia.

3. Sphæroidea.
4. Monilifera.

5. Subquadrifolia.
6. Inæqualifolia.
7. Dolabriformia.
8. Ringentia.
9. Rostrata.
10. Subulata.

Frutescentia foliis cylindraceis.

11. Calamiformia.
12. Teretiuscula.
13. Articulata.
14. Tenuifolia.
15. Adunca.
16. Spinosa.
17. Tuberosa.
18. Papillosa.

Frutescentia foliis triquetris.

19. Scabra.
20. Bracteata.
21. Sarmentosa.
22. Rubricaulia.
23. Conferta.
24. Capitata.
25. Reptantia.
26. Acinacifolia.
27. Forficata.
28. Lunata.
29. Deltoidea.
30. Falcata.
31. Microphylla.
32. Cymbiformia.
33. Æquilateralia.

34. Paniculata.
35. Perfoliata.

These are all essential Sections, and the science is advanced by the publication of them. But the present writer feels, and ought to feel, the necessity of more; being acquainted with many *Mesembryanthema* which His Highness the Prince has probably never seen.

The following Sections are therefore here proposed:—

ACAULIA: 1. Sæpe subacaulia, radice perenni.

† floribus rubicundis vel albicantibus; in una specie luteis.

1. Minima.
2. Sphæroidea.
3. Semiovata.
4. Obtusa.

†† floribus luteis; exceptis *Moniliformibus* albis.

5. Magnipuncta.
6. Aloidea.
7. Scapigera.
8. Ringentia.
9. Dolabriformia.
10. Carinantia.
11. Rostrata.
12. Moniliformia.
13. Linguæformia.
14. Cruciata.
15. Difformia.

††† floribus rubicundis; *Calamiformibus* albis exceptis.

16. Gibbosa.
17. Calamiformia.
18. Teretifolia.
19. Bellidiflora.
20. Acuta.

CEPHALOPHYLLA: 2. Caulescentia foliis congeste capitatis.

21. Corniculata.
22. Capitata.

REPTANTIA: 3. Suffrutices, caulibus sæpius decumbenti-prostratis angulosis: floribus polygynis, (1 excepto) rubicundis.

23. Sarmentosa.
24. Rubricaulia.
25. Acinacifolia.
26. Humillima.

PERFOLIATA: 4. Suffrutices: foliorum vaginis omnino, supernève carnoso-incrassatis: floribus albis rubicundisve.

27. Forficata.
28. Geminata.
29. Rostellata.
30. Uncinata.
31. Vaginata.
32. Lineata.
33. Tumidula.
34. Lineolata.

DELTOIDEA: 5. Suffrutices suberecti, foliis triquetris brevibus subacinaciformibus s. plus minus deltoideis: floribus rubicundis.

35. Megacephala.
36. Muricata.
37. Microphylla.

TRIQUETRA: 6. Suffrutices; foliis subfalcatis triquetrisve.

† floribus plus minus rubicundis.

+ foliis plus minus falcatis, et compressis.

38. Lunata.
39. Pallidiflora.
40. Glomerata.
41. Asperifolia.
42. Dilatata.
43. Virgata.

++ floribus inclaudentibus.

44. Bracteata.

+++ foliis triquetris, floribus magnis rubicundis albisve.

45. Eximia.
46. Blanda.

†† floribus luteis sive aurantiis.

47. Aurea.
48. Cymbiformia.

TERETIUSCULA: 7. Suffrutices; foliis teretiusculis.

49. Tenuifolia.
50. Adunca.
51. Spinosa.
52. Corallina.
53. Sebacea.

PAPULOSA: 8. Suffrutices; annua: biennia: perenniave: foliis fere semper plus minus papulosis.

54. Platiphylla.
55. Pomeridiana.
56. Limpida.
57. Calyculata.
58. Cylindracea.
59. Planifolia.
60. Crassulina.
61. Digitiflora.
62. Juncea.
63. Spinulifera.
64. Trichotoma.
65. Noctiflora.
66. Aspericaulia.
67. Hispicaulia.
68. Echinata.
69. Barbata.

Obs. It is to be believed that the above numerous and natural groups comprise amongst them several true and natural Genera. Nevertheless, their actual limits and essential characteristics

(except in *M. glabrum* hereunder detached) lie veiled in difficulties, which (thus far at least) escape development and defy research. They will not be fettered.

And yet the author once had vainly hoped that the MINIMA, from the tubular corollæ of some of them; the LINGUIFORMIA, from their quadrifid calyces and multilocular capsules; the ARTICULATA, from their singular calyx; the BRACTEATA, from their hard, coloured internal petaloid fibrillæ (and their small number of abbreviated true *filaments*), keeping open continually their lively flowers; the MEGACEPHALA and the PERFOLIATA, &c. &c.; might each have constituted a distinct genus (and they probably are such). But he has hitherto been so effectually foiled by such insensible shades and intermediate gradations of character, amongst species even of the same section (the *Minima* not excepted), that he has not yet been able to reconcile their discrepancies. He does not, however, completely despair; and, with hopes of some ulterior success from the formation of the capsules, has again taken all the species into actual cultivation, which he can procure, having commenced by collecting the *difficult species*: but he soon found the remainder necessary to elicit their full distinctions; to contrast their characters, and combine them effectually; and to advance the science in the manner it deserves.

But the embodying of so many points (and several of them so apparently variable) with happy harmony and due congruity, is still a task of time. And even this is increased by the continual accession of new species, requiring even new divisions. Until, therefore, this still distant period

arrives, the author proposes the present improved distribution of this vast genus, as the result of all he has hitherto, with every advantage, been able to accomplish.

It will be found to comprise all the *Mesembryanthema* hitherto discovered or described by the author and his friends (above 300 species and threescore varieties); with an epitomized description of the whole; tracing each species to the works of Linnæus, or the first author on the subject after him: and giving to each variety such a name as will serve hereafter for a specific one, if necessary; together with a reference to a published figure, wherever it is practicable. And he is happy to add, that in the course of the arrangement, brief as it is, will be found new matter—many new and unrecorded species—many of sweet hues and vivid tints—and some of striking and unrivalled beauty;—together with a few still more interesting, from the strange construction of their extraordinary forms.

ACAULIA. 1. Caule nullo brevissimove, radice perenni; foliis magnis.

1. Minima. Carnosa obcordata obconicave, rarius rotundiora vel planiora, demum dichotoma; vaginarum foliorum truncatorum connatorum solum consistentia, et semper ruptata ab egressione novarum vagi-

narum, et exinde marcescentia; floribus solitariis sessilibus centralibus, plus minus tubatis; roseis stramineis albicantibusve. (Anglicè Dumplins.)

Obs. If this Section proves to be a Genus, the name of *Conophyton* would be apt.

minutum. 1. * M. (small white) albidum lævigatum subimmune; flore longe tubato.
M. minutum. Nob. in Misc. nat. 21.—*Bot. mag.* 1376.
Fabam equinam vix æquat.
Flores læte rubicundi tubo semiunciali.

minimum. 2. * M. (small chequered) læve subglaucescens: punctis confluentibus subramosis: germine exerto. *Nob. in Obs. mesem. &c. p.* 126.
Flos ex albido-lutescens sessilis. *Germen* e superficie plantæ exertum. Statura fere prioris. Forte est Ficoides, forte *Mauritan,* præ-exigua (the natives call it *Lowon*) *Pet. gaz. t.* 39. 3.
In caldario acquiret ætate cauliculos perbreves, et soboles pauciores quam in affinibus.

perpusillum. 3. * M. (small, exerted) læve virescens punctis validis confluenter ramosis; germine incluso.
Obs. Vigebat apud Kew, 1819. A priore solum differt germine incluso; et parum in colore saturatiore, sobolibusque numerosioribus.

obcordellum. 4. * M. (glaucous chequered) glaucescens: punctis confluenter-ramosis, germine incluso.
M. obcordellum. Nob. in Misc. nat. &c. 21.
Floret cum prioribus, corolla albicante.

Priore duplo majus, at minus quam figura M. obcordellum *Bot. mag.* 1647.

M. (green chequered) virescens: punctis confluenter subtuberculiformibus: germine incluso, corolla alba. *obconellum.* 5.
M. obconellum. Nob. in Misc. nat. 21. *&c.* *
Introd. circa 1786.
E punctis parum elevatis, tactu asperiusculum.

M. (fig-shaped) obpyramidale pyriformeve, glaucum: apice retuse-obtuso punctis sæpe distinctis virescentibus obsoletissimis. *Ficiforme.* 6.
Communicavit illust. Princeps de Salm Dyck A.D. 1819. *
M. Ficiforme ejus est in *Tentamen bot.* 17.
Nomen a me propositum.
Habitat C. B. S.?
Flores non vidi.
Planta pallida unciam alta, priore duplo major, punctis paucioribus pallidioribus rarius confluentibus.

M. (large dotted) valde depressum, subglaucum: punctis subdistinctis, germine exerto. *truncatellum.* 7.
M. truncatellum. Nob. in Misc. nat. 22. *&c.* *
Introd. 1795.
Floret cum prioribus, corolla staminea. Ultimo humilius; magis truncatum, magisve depressum; punctis paucioribus distinctioribus.

M. (cloth-button) subcanescens subpubescens immune, valde depressum. *fibuliforme.* 8.
M. fibuliforme. Nob. in Misc. nat. 22. *&c.* *
Flores non vidi.

truncatum. 9. M. (truncate conic) acaule, foliis conicis truncatis. *Thunb. prod.* 88.
Obs. In hortis nostris nondum viget.
Non vidi.
Si *verè conicum* (nec obconicum), distinctissimum est ab omnibus, et præsingulare.

turbiniforme. 10. * M. (great obconic) obconicum, exactè truncatum.
Delineationem in Africa factam, sine flore, cum amico Dom. Burchell, solum vidi.
Prioribus 2-3-plo majus plusve; rectè truncatum turbiniforme.

uvæforme. 11. * M. (the Grape) subglobosum pallide virescens uvæforme; punctulis parvis parum confluentibus saturatioribus.
Viget in regio horto Kewense A.D. 1820.
Obs. Uvulam viridem (dictam Muscadine) facile simulat.
Lycoperdastrum &c. Burm. dec. tab. 10. *fig.* 2?
Introd. 1820.
Habitat C. B. S. locis uliginosis salsis. *Burm. l. c.*

2. Sphæroidea.

nuciforme. 12. * M. (nut-shaped) glaucum, læve: foliorum apicibus inæqualiter distinctis, supra planis.
M. nuciforme. Nob. in Obs. mesem. 129.
Flores non vidi. Unciale: foliis connatis fere ad apices immunibus: ruptatis, egressione novorum foliorum.
Obs. It may require some apology for founding

named Sections (for the sake of uniformity in the plural number) where we know as yet but single species, as above: and the individuals which form the species must be considered as constituting the plural; instead of the groups of species in other Sections.

In the present, and a few similar cases of anomaly below, no character is added to the sectional name, because that is presumed to fall more naturally under the species it embraces. In genera of one species it is the reverse, on account of the character being taken from the fructification.

3. Semiovata, caudice nullo, foliis albidis lævibus immunibus, semioviformibus; supra planis, subtus convexis: basi intus sæpe pustulatis.

M. (broad short-white) foliis vivis subquatuor late ovatis s. parabolicis semiteretibus expansis. *testiculare.*
M. testiculare. Ait. kew. ed. 1. *v.* 1. 181.—*Corolla alba? Ait. kew. l. c.* 13.

M. (narrow short-white) foliis vivis 6-8 oblongo-ovatis semiteretibus erectioribus. *octophyllum.*
M. testiculare β. Nob. in Syn. succ. 205.—*M. testiculare. Bot. mag.* 1573. 14. *
Obs. Corolla lutea. *Folia* minora quam in priore, erectiora, angustiora.
β. foliis longioribus erectioribus.
M. testiculare γ. Syn. succ. 204.
γ *roseum. Jacq. frag. t.* 12. *f.* 2. *p.* 20. 73.

4. Obtusa, foliiis vivis subquatuor semiteretibus teretibusve, obtusis læ-

vibus immunibus; junioribus paribus quasi fissis.

obtusum. 15. * M. (cloven green) virescens: foliis inæqualiter semitereti-acinaciformibus obtusis. *Nob. in Syn. succ.* 206.

Obs. *Calyx* 6-fidus fere sessilis. Corolla magna læte rubicunda speciosa.

fissum. 16. * M. (cloven white) albidum, foliis æqualiter semiteretibus obtusissimis. *Nobis in Synops. succ. p.* 205.

digitiforme. 17. M. (finger-formed) acaule: foliis teretibus lævissimis. *Thunb. prod.* 88.

M. digitatum foliis alternis teretibus obtusis, floribus axillaribus sessilibus. *Hort. kew. ed.* 1. *v.* 2. *p.* 181?

Obs. Nondum vidi.

5. Magnipuncta. Acaulia: foliis integris crassissimis paucis, exacte decussatis plus minus canis glaucisve, basi semiteretibus suberectis; supra planis, supernè grossè clavatim carinato-triquetris obtusis, punctis magnis numerosis sparsis saturatioribus; (floribus sessilibus mediocribus luteis?)

magnipunctum. 18. * M. (great-dotted club-leaved) foliis perfectis subquatuor magnis clavato-triquetris grossissimis glaucescentibus, crebre et viride magnipunctatis.

M. magnipunctatum. Nob. in Suppl. pl. succ. p. 87.

Variat

α *sesquiunciale;* foliorum crassissimorum angulis adultis sesquiunciam crassis: flore luteo sessili majusculo.

β *unciale;* circiter duplo minus.

γ *affine;* M. magnipunctatum? *Hort. dyck. cat. A.D.* 1820. *p.* 21.

M. (hoary club-leaved) foliis incanescentibus, basi semiteretibus attenuatis; supernè auctim gibboso-carinatis. *Nob. in Misc. nat. &c.* 25. *canum.* 19. *

A priore, cui simile, instanter dignoscitur, minore statura, canoque colore.

6. Aloidea.

M. (Aloë-like) acaule: foliis integris semiteretibus virescentibus albo marmorate punctatis, sursum auctis, supra subconcavis, apice carinato-triquetris. *Nob. in Suppl. pl. p.* 88. *Aloides.* 20. *

Senectæ plantæ cespitosæ, radicibus fusiformibus, foliis crassis numerosis patulis vix regulariter decussatis, floribus centralibus sessilibus luteis, mediocribus.

7. Scapigera, foliis præcrassis immunibus basi semiteretibus; supernè clavatim carinato-triquetris lateribus (excepto ultimo) paucidentatis: scapis semipedalibus grandibracteatis ramulosis: floribus pomeridianis magnis luteis.

M. (Dog-chap) subacaule, foliis glaucis apicem versus bracteisque dentatis incurvantibus, pedunculis longitudine foliorum. *Nob. in Syn. succ. &c.* 217.—*Dill. elth. fig.* 231. *caninum.* 21. *

vulpinum. 22. * M. (Fox-chap) subacaule, foliis glaucis apicem versus grandidentatis integrisve; senectis horizontalibus, bracteis integris, pedunculis folio longioribus. *Nob. in Syn. succ.* 218.

Elatius quam priore, foliis paulo longioribus gracilioribus tantillum viridioribus, dentibus paucioribus, majoribus.

hybridum. 23. * M. (bastard) acaule læve albidum: foliis semiteretibus integris, supernè carinato-triquetris parumque incrassatis, mucronulo recurvo. *Nob. in Syn. succ.* 218.

Obs. *Folia* seminalia primi anni sæpe dente uno alterove instructa, adulta sæpissimè integerrima. Hybridum inter M. albidum et caninum, e seminibus prioris casualiter ortum in horto amici Dom. Howard, A.D. 1810.

Flores non vidi.

Obs. If a plant is the *known* production of two species, it is neither of them: for if it is *not* neither, it must be either, *i. e.* both; which cannot be: and therefore it is a thing as it were *per alios*, and is better so described; recording in its very name its origin.

albidum. 24. * M. (white) acaule prælæve album: foliis crassè subulatis, triquetris obtusis cum mucrone, basi semiteretibus. *Linn. sp. pl.* 669.—*Bot. mag.* 1824.—*Dill. elth. fig.* 232.—*Brad. succ.* 43.

8. Ringentia, foliis præcrassis semiteretibus, supernè sensim dilatatis; apicem versus triquetris-carinatis lateribus ciliatim dentatis, ciliis sæpe longis: floribus sessilibus magnis luteis pomeridianis.—Paria

juniora foliorum, animalium rictum representantia.

M. (Tiger-chap) virescens: acaule: foliis (amplexicaulibus) cordato-ovatis expansis, albo crebre marmoratis altissimè ciliatis: supra planis, apice cartilagineo-carinatis. *Nob. in Syn. succ. &c.* 216.—*Bot. reg.* 260. *tigrinum.* 25. *

M. (Cat-chap) acaule glaucescens: foliis altè ciliato-dentatis obsoletissimè punctatis; apicibus cartilagineo-carinatis. *Nob. in Syn. succ. &c.* 216.—*Dill. elth. fig.* 220. *felinum.* 26. *

Obs. Ad lucem in lente folia creberrimè albo-punctata.

M. (Weasle-chap) subacaule virescens pellucenter magni-punctatum: foliis elevato triquetris; supernè ciliatim brevidentatis; basi interne pustulato-gibbosis. *Nob. in Suppl. pl. succ.* 87.—*Salm. tent. bot.* 9. *mustellinum.* 27. *

Obs. Prioribus 3-plo minus, at affine: sed sequentem magis approximat. *Flores* (in Septembre) vespertini terminales solitarii mediocres subsessiles, s. pedunculo brevi subcompresso clavato. *Calyx* 4-fidus, laciniis (vespere) reflexis, 2 duplo minoribus interioribus macris, oblongo-attenuatis obtusis, ad margines breviter membranaceis, apicibus subcarinatis: 2 exterioribus sine membrana, supernè carina subdenticulata, petalorum fere longitudine. *Corolla* odore pungenti quasi moschatim fœniculaceo,—vel etiam subnarcissino, at minus suave: *petalis* valde numerosis setaceis; sed ita erecto-expansis, distantiusculos evadunt, nec se ipsos tangentibus. *Filamenta* longitudine varia lutea et antheræ

luteæ. *Styli* stigmatave breves, 4? reconditi (non satis examinavi) basi coaliti, in unum stylum.

murinum. 28. * M. (Mouse-chap) subacaule glaucum: foliis trifarie ciliato-denticulatis parvi-punctatis. *Nob. in Syn. succ.* 217.

9. Dolabriformia, subacaulia, foliis dolabriformibus; floribus luteis pomeridianis sub-vesperisve.

dolabriforme. 29. M. (hatchet-leaved) foliis exacte dolabriformibus; caule senecto fere semipedali erecto.
M. dolabriforme. Linn. sp. pl.—Bot. mag. 32.
β. Paulo minus, foliis minus gibbosis.

10. Carinantia.

carinans. 30. * M. (scymetar-leaved, dwarf) foliis erecto-incurvis, sursum carinantibus, s. graciliter acinaciformibus, elongatis glaucis magnipuncto-rugosiusculis; supra lente sulcato-concavis.
M. canum. Salm. tent. bot. 20, *nec Aliorum.*
Habitat .... G. H. ♃.
Flores ignoti.
Obs. Communicavit illust. Princeps de Salm Dyck, nomine M. cani. Est nunc acaule, foliis punctis numerosis magnis viridibus; senectis (foliis) expanso-incurvis, omnibus basi semiteretibus. Species valdè singularis et omnino anomala, nulli affinis: sed locata est cum M. dolabriformi, a Principe de Salm Dyck, in loco; at vix rectim. Fortasse affinius M. albido, potiusve M. magnipuncto; sed omnino suæ sectionis; et flores (mihi ignotos) melius forte docebunt locare.

11. ROSTRATA. Acaulia : subacauliave : foliis 4-6 suberectis glaucis subulatis semiteretibus punctatis, apice triquetris : ineptis per paria Ardeæ rostrum referentibus : floribus fere semper luteis.

M. (toothed, beaked) foliis glaucissimis subtriquetris compressis ; apice dilatato-carinatis, carina sæpe denticulata. *Nobis in Syn. succ. p.* 215. *denticulatum.* 31. *

α *canum.*
β *glaucum.*
γ *candidissimum.*

M. (robust beaked) foliis obtusis punctatis basi intus pustulato-gibbosis, caule robusto brevi decumbente subramoso. *Nob. in Syn. succ.* 211. *robustum.* 32. *

OBS. Caulis in senectis 4-uncialis crassus. Flores non vidi.
β *simile.* Viget in *Hort. dyck.*

M. (compact) acaule, foliis connatis punctatis semiteretibus, apice triquetris subreflexis acutis, floribus sessilibus, calyce subcylindraceo sexfido (corollis luteis). *Hort. kew. ed.* 1. *v.* 2. *p.* 191. *compactum.* 33.

Nondum vidi. An rectè locatum ?
A Rostratis discrepat calyce 6-fido, floribusque sessilibus. Accedit forte in formâ ; et petalorum colore.

M. (quadrifid spotless beaked) subacaule : foliis cano-glaucis obtusis, apicem versus punctis rarissimis ; calyce quadrifido. *Nob. in Syn. succ. p.* 212. *quadrifidum.* 34. *

Dignoscitur facile foliis canescentibus fere immunibus; caudice senecto trientali robusto, decumbente.

bifidum. 35. * M. (bifid beaked) subacaule: foliis glaucis valde obtusis multipunctatis: calycibus 2-4-fidis. *Nob. in Syn. succ.* 212.

Obs. Foliis brevioribus quam in priore; magis obtusis: caule debiliore.

bibracteatum. 36. * M. (greater Heron-beaked) subacaule ramosum: foliis subulatis elongatis punctatis perglaucis: bracteis quatuor decussatis scapo brevioribus. *Nob. in Syn. succ.* 213.

Obs. M. rostrato paulo majus, caule senecto subunciali ramoso. *Folia* glauciora punctis paucioribus majoribus. Forte sequentis mera varietas major.

rostratum. 37. * M. (Heron-beaked) acaule foliis subulatis elongatis acutis glaucis præpunctatis: bracteis 2, scapo longioribus.

M. rostratum. *Linn. sp. pl.* 696. — *Dill. elth. fig.* 229, sine flore.—*Nob. in Syn. succ.* 214, excluso synon. Milleri.

β *tuberculatum*; acaule: foliis semicylindricis connatis, externe tuberculatis. *Mill. dic. ed.* 8. *no.* 32.

Obs. Foliis brevioribus glaucioribus, forte minus lævibus, per lentem uti affinia, minute ciliatis.

ramulosum. 38. * M. (small-beaked) foliis obtusis basi intus pustulato-gibbosis, senectis expansis, caule senecto triunciali ramoso, decumbente. *Nob. in Syn. succ.* 215.

Folia præcedentium, at obtusa, et fere triplo minora; caudice magis ramuloso.

12. MONILIFORMIA, æstate aphylla: caudicibus ramulosis 1-3-uncialibus nodoso-moniliformibus: foliis 4 singulo anno in singulo ramulo; 2 primoribus connatis ad apices, s. truncatis usque vaginas: 2 sequentibus elongatis 1-6-uncialibus, basi connatis marcescenti-deciduis: calycibus foliisve papuloso-crystallinis.

M. (pea-shaped) foliis papuloso-crystallinis, primoribus connato-pisiformibus s. sphæroideis, sequentibus semiteretibus: caudice confertim ramosissimo suberoso unciali. *Nob. in Syn. succ. &c.* 206. — *pisiforme.* 39. *

M. (necklace) foliis primoribus connato-sphæroideis; sequentibus semiteretibus subulatis longissimis recurvantibus viridibus. *Nob. in Syn. succ. &c.* 207. — *moniliforme.* 40. *

Flores mediocres nivei.

13. LINGUÆFORMIA (tongue-leaved), Acaulia: radicibus senectis sæpe fusiformibus; foliis exacte distichis imbricatis linguæformibus sæpe declivibus, grossis mollibus pulposis plus minus lucidis viridibus, lævibus nudis, supra planis, infra convexis, lateribus sæpe cultratis, apicibus indies oblique irregularibus uncatis, incurvisve: floribus polygynis, sæpe

sessilibus maximis lucidè luteis, latissimis petalis antemeridianis.

Obs. Every individual of this section varies in size and gloss, and even in length of peduncle, from being well or poorly fed : and it is only when out of doors, and in unshaded situations, that the true direction of the leaves can be depended on ; a character of moment in settling the varieties ; which, after all, is nearly as much a matter of taste as of reality : for a permanent variety, if raised from native seed, is altogether a kind of natural species ; and a natural species is the same thing of a higher degree : and even Sections themselves are but superior stories of the same building, completing together, as it were, in their genus, the family mansion and its many rooms.

* Crassiora, foliis præpinguibus, apice uncis majoribus.

scalpratum. 41. * M. (great graver-leaved tongue) foliis declivissimis scalpratiformibus latissimis, altero margine crassiori, basi intus pustulato-gibbosis flore sessili. *Nob. in Syn. succ.* 220.—*M. folio scalprato &c. Dill. elth. f.* 224.—*M. linguæforme. Linn. sp. pl.* 699. *et Mill. dic. ed.* 8.

β *angustius.*

Viget in *Hort. dyck.*

Olim in Anglia.

M. (thick green sweet-scented) subacaule, foliis (saturate viridibus) linguæformibus crassis, uno convexiusculo apice obtuso, altero in carinam valde producto: flore subpedunculato fragrante. *Salm. tent. bot. p.* 8. *fragrans.* 42.

Communicavit illustr. Princeps de Salm Dyck A.D. 1820.

M. (oblique, pale, thick) foliis oblique linguæformibus pallide viridibus mollissimis, junioribus ciliato-pubescentibus, apice uncato-incurvis. *Nob. in Syn. succ.* 222. *præpingue.* 43. *

Obs. Capsula conico-depressa sessili.

** Disticha, foliis minus crassis, (primo excepto) angustioribus.

M. (broad middle tongue) subacaule: foliis linguæformibus declivis 4-uncialibus, unciam latis cultratis: pedunculis pollicaribus. *Nobis in Suppl. pl. succ.* 88. *medium.* 44. *

Obs. Folia saturate viridia apicibus absque unco.

M. (long, cultrated) subacaule: foliis distichis linguæformibus margine et apice cultratis; flore pedunculato. *Salm. tent. bot. p.* 7. *cultratum.* 45.

Communicavit illustr. Princeps de Salm Dyck A.D. 1820.

Folia omnium affinium longissima.

M. (long, high polished) foliis longis perviridibus lucidissimè politis: pedunculis calyce longioribus: capsula minore depressa. *lucidum.* 46. *

M. lucidum. Mill. dic. ed. 8, et inde *Nob. in Suppl. pl. succ.* 89. Ficoides &c., foliis latiss. crassiss. lucidis, &c. *Brad. succ. t.* 24, *mala.*—

M. longum. Nob. in Misc. nat. 34.—*M. folio linguæformi longiore. Dill. elth. f.* 227.

adscendens. 47. * M. (long peduncled) foliis late linguæformibus adscendentibus obtusissimis viridibus: pedunculis longioribus. *Nob. in Syn. succ.* 220.—*Catal. hort. dyck. p.* 20.

Forte prioris varietas.

pustulatum. 48. * M. (blistered tongue) foliis linguæformibus adscendentibus 5-6-uncialibus, 3-11 lineas latis, basi internè grandipustulatis. *Nob. in Suppl. pl. succ. p.* 88.

β. duplo minus vel plus, pustulâ altiore.

longum. 49. * M. (long thin-leaved) foliis longissime linguæformibus lucidis minus crassis: floribus subsessilibus: capsula magna depressa.

α flaccidum (Volckamer's long flaccid) foliis declivibus fere omnium affinium longissimis, minus crassis et flaccidioribus; pedunculo sæpe sessili; capsulis magnis depressis numerosis.

M. longum β, flaccidum. Nob. in Syn. succ. 222. —*M. depressum. Bot. mag.* 1866, nec Aliorum, e planta parva.—Ficoides &c. folio longo triangulari lucido obtuso. *Volck. norib.* 165, cum icone.

β declive (lesser erect edged); foliis anguste linguæformibus macris, marginibus cœlo perpendiculariter sæpe declivibus.

Obs. Paulo minus, minoribus floribus sessilibus, foliis aëre aperto magis declivibus: capsulâ depressa.

From the Earl of Tankerville's garden at Walton.

γ angustius (narrow-leaved, tufting); omnium fere

affinium ramulosius, cæspitosum : foliis angustioribus pallidioribus crassiusculis brevioribus parum variantibus, subadscententibus : capsula parva depressa.

δ *purpurascens* (purple green) priori simillimum, foliis livide purpurascentibus.

Vigebat, cum priore, in regio horto Kewense, e C. B. S., A.D. 1819.

Forte propria species cum γ.

ε *uncatum* (long bright leaden-green); ramosius : foliis longissimis planis lucidissimis, crassioribus depressis, lævioribus saturatioribus, s. plumbescente-viridibus, apice sæpius grande incurvo-uncatis : capsula magna depressa.

M. præpingue. Catal. hort. dyck. A. D. 1816, *p.* 18 ? nec Aliorum : `et inde, ni fallor, accepi A. D. 1819.

Obs. Forte propria species, magis uncata quam cæteris et diversa ; et inde simulat M. præpingue, at foliis longioribus, angustioribus, minus crassis, &c. — Omnium lucidissimum, excepto M. lucido : valde cespitosum.

ζ *attollens* (narrow dark ascending) ; priori simillimum : minus ramosum : foliis magis adscendentibus, minus plumbescentibus, vel nitentibus.

E regio horto Kewense, A.D. 1819.
A C. B. S.

M. (common tongue) foliis inæqualiter linguæformibus crassis viridibus subinde carinatis : capsula parum elevata, subsessili. *Nob. in Misc. nat. p.* 33, *et Syn. succ.* 221, exclusis synonymis, excepto *Hort. kew. ed.* 2. *v.* 3. *p.* 218.— *Dill. elth. f.* 226 ? *linguæforme.* 50.

a. foliis inæqualiter linguæformibus perviridibus

subinde carinatis, adscendentibus supraque concavis.

β *rufescens* (reddish-green, prostrate); prostratum: foliis linguæformibus obtusis arctissimè imbricatis, planis subdeclivibus rufescentibus, sæpe quasi subundulatis, apice varie incurvis. *Nob. in Syn. succ.* 221, *et Suppl. pl. succ.* 89.

Facies fere prioris, sed in aëre aperto rufescit, et omnium rarissime floret.

γ *subcruciatum* (small subcruciate); foliis varie linguæformibus adscendentibus cultratis planis sulcatisve irregularibus, subinde oblique subcruciatis; capsula subelevata.

Nomine "M. cruciati, ex Hollandia," communicavit amicus Dom. Jos. Hooker, A. D. 1820.

Forte omnium affinium minimum.

δ *prostratum* (pale, thick, prostrate); magnum: ramosius; foliis, aëre aperto, humi adpressis crassis planis pallide viridibus: capsula magna elevata.

ε *assurgens* (pale, thick, upright); maximum (hujus speciei): minime ramosum: foliis magnis crassis pallide viridibus assurgentibus subinde fere semierectis: capsula magna subelevata.

E regio horto Kewense, a C. B. S., A.D. 1819.

Omnium (hujus speciei) minime ramosum, s. pauoribus propaginibus.

latum. 51. * M. (broad, short, Dillenian) foliis linguæformibus obtusis crassis, sæpe declivibus, subexcavatisque, capsula magna conica subsessili. *Nob. in Misc. nat. p.* 32, *et Syn. succ.* 220.—*M. folio linguæformi latiore. Dill. elth. f.* 225.

Obs. This ancient species was obligingly communicated to the author in 1819, from the cele-

brated garden of Oxford, by the Regius Professor of Botany, Dr. Williams; together with cuttings of all the other *Mesembryanthema* then living in that collection: which, I conceive there is every presumptive reason to suppose, are the legitimate descendants of the far-famed Sherardian stock at Eltham; and which shine so conspicuously in the works of Dillenius. Of all the *Mesembryanthema* that celebrated botanist has so interestingly figured in his matchless *Hortus*, *M. serratum* alone is lost:—all the others are now alive before the writer.

β *breve* (short, broad, flat); prostratum: foliis late linguæformibus brevibus obtusissimis perviridibus humi depressis: capsula parva depressa subsessili.

M. latum β. Nob. in Misc. nat. 33.

Obs. In capsula minore valde differt, foliis magis depressis. Olim e regio horto Kewense, a C. B. S., ante 1802.

M. (small, recurving-leaved) prostratum: foliis anguste linguæformibus obtusis recurvis-depressis, apice varie incurvis: capsula depressa. *Nob. in Misc. nat.* 33, *at Syn. succ.* 221.—*M. folio linguæformi angustiore. Dill. elth. f.* 226? *depressum.* 52. *

α *pallens* (light-green); ut supra.

β *lividum* (rufous-green); foliis minoribus lividè rufescentibus, magis revoluto-depressis.

Obs. Delicatius et tenerius quam α.

Vigebat in regio horto Kewense, A. D. 1819, a C. B. S.

14. Cruciata, foliis anguste linguæformibus semicylindris, longissimis; plus minus obliquis per paria, sive oblique cruciatis. Cætera ut in priore sectione.

cruciatum. 53. * M. (soft, cruciate) foliis lineari-linguæformibus semicylindricis mollissimis cruciatis: caule senecto trientali. *Nob. in Syn. succ.* 224.

taurinum. 54. * M. (Bull's-horn) foliis bifariis oblique cruciatis semiteretibus obtusis crassissimis lutescente-viridibus incurvis: caudice senecto semipedali. *Nob. in Syn. succ.* 224.
Prioris facie, sed majus; at minus cruciatum; pallidius; foliis subdigitiformibus, et digiti fere magnitudine.

Salmii. 55. * M. (the Salmian Tongue) acaule: foliis subsemicylindrico-subulatis varieve oblique subuncato-obtusis, basi læviter latè pustulatis; apice carinatis: capsula depressa semiinclusa.
M. Salmii. Nob. in Suppl. pl. succ. 89, *et Salm. tent. bot. p.* 11.—*M. cruciatum, Catal. hort. dyck. A. D.* 1816, *p.* 17.
Variat
α *decussatum* (cruciate); ut supra: foliis cruciatis expansis, sæpe cultratis perviridibus, duriusculis potiusve carnoso-firmis: flore solitario, centrali magno luteo, (Linguæformium) antemeridiano absque ullo pedunculo.
β *semicruciatum* (semicruciate); foliis oblique distichis rectis, nec exacte decussatis, et magis linguæformibus. *Salm. tent. bot. p.* 12.

γ *angustifolium* (narrow-leaved); "la feuille est plus longue et plus étroite."
Princeps de Salm Dyck, *in littera* mecum.
Hæcce tria nobilia Linguæformia ipse Princeps benignissimè communicavit; α in A. D. 1818, β in 1820, iteratim cum γ, nuperrimè.
Florem unicum solum vidi.

M. (thick, acute Tongue) foliis decussatis sub-erectis, patulisve plus semiteretibus subulatis acutis mollibus basi sæpe pustulatis: germine exerto subpedunculato. *surrectum.* 56. *
β. foliis brevioribus, magis patentibus.
Habeo varietates ambas e regio horto Kewense, ex seminibus Capensibus ortas, A. D. 1819.

15. Difformia, subacaulia; foliis obliquis, s. oblique cruciatis semicylindricis; vaginis superne utrinque sulcatis; apicem versus apiceve sæpe oblique difformibus; denteque uno alterove sæpe instructis. Cætera ut in sectione priori.

M. (various leaved) acaule; foliis viridibus difformibus, superioribus longioribus. *Nob. in Misc. nat.* 36. *heterophyllum.* 57. *
Obs. Folia robusta; inferiora ut in M. cano; superiora fere ut in M. difforme, at minora.

M. (narrow Tongue) foliis lineari-linguæformibus semicylindricis longissimis. *Nob. in Obs. Mesem. p.* 176. (*A. D.* 1795)—*Misc. nat.* 34.—*Syn. succ.* 222. *angustum.* 58. *
β *pallidum*; foliis oblique subcruciatis pallidioribus et forte minoribus, minus crassis.

M. angustum. Hort. dyck. A.D. 1818. *p.* 17.
Forte propria, vel varietas alii speciei.
Exemplum parvum nuperrime receptum ab illustr. Principe de Salm Dyck, solum vidi.
γ *heterophyllum* (long semicylindric-leaved); foliis flabelliformiter semiexpansis humi depressis fere semiteretibus prælongis grossis, apice oblique uncato-difformibus obtusis carinatisve.
M. heterophyllum. Jackson in Bot. rep. v. 8. *pl.* 540.
Obs. The above figure in *Bot. rep.* does not (as in *Syn. succ. p.* 223 I queried) belong to *M. præpingue*, but more probably to the present species as a variety; and by no means to my *M. heterophyllum.* Neither is the account in *Bot. rep. in loco*, of the providential distribution of the seeds of *Mesembryanthema* quite so new as is there presumed, having been detailed at large in 1803, in *Misc. nat. p.* 101 and 102. But Dr. Sims's paper (cited in *Bot. rep. l. c.*) on the capsules of *M. pinnatifidum*, in the *Medical Journal* for 1799 (the translation only of which, in *Annals of Botany* for Sept. 1804, I have seen), contains the *new* and interesting idea of painting the dry and reviviscent capsules ornamentally. This may lead to pleasing amusements, and I recommend for trial the larger (more than inch wide capsules) of *M. medium*, *M. pugioniforme*, &c. tastily blended with others of every size. Those of *M. purpuro-croceum*, or its var. *flavo-croceum*, are beautifully tinted of themselves, and might remain unaided. And provided the colours, applied as Dr. Sims recommends, can be fixed ones, and not in oil (which by retarding absorption would ruin the process) we may have our mantlepieces in

curiously natural and beautiful bloom, in a few minutes, and as often as we please, from the same subjects!

M. (difformed) foliis oblique cruciatis longis apicem versus, varianter oblique difformibus, denteque uno alterove obscuro munitis; caudice senecto 3-6-unciali. *Nob. in Syn. succ.* 225.—*Dill. elth. f.* 242. *difforme.* 59. *

β breviicaule; caudice breviore.

Viget in Hort. Dyck. Semel in Anglia.

M. (double-toothed) foliis semicylindricis grossis mollibus, dentibus duobus post medium magnis suboppositis carnosis; apice oblique incurveve deformitèr variabilibus. *bidentatum.* 60. *

M. bidentatum. Nob. in Suppl. pl. succ. 89.

α minus; M. semicylindricum parum simulans.

β majus; fere duplo majus; potius refert ad M. difforme; at distinctum et in singulari genere valde singulare.

Flores magni affinium, lucide lutei breviter pedunculati; petalis latis apice truncatim dentato-erosis; capsula parum depressa.

M. (small difformed) foliis angustissime linguæformibus semiteretibus, apicem versus obliquis, unoque dente obsoleto alterove munitis; caudice senecto ramoso semipedali: capsula depressa. *Nob. in Syn. succ.* 225. *semicylindricum.* 61. *

M. foliis difformibus &c. Dill. elth. f. 241, *nec* 242.—*Pluk. mant.* 325. 4.

Obs. Linguæformia bonum genus constituunt, et nomen Glottiphyllum propono.

††† Floribus rubicundis: exceptis Calamiformibus albis.

16. Gibbosa, subacaulia: foliis connatis fere ad medium, difformibus grossissimis lævibus; uno singuli paris gibbose abbreviato, altero apice oblique aucto: calyce sexfido: corollis parvulis hyemalibus roseis; stylis 6.—Genus bonum, et Gibbæum nomen propono.

gibbosum. 62. * M. (great pale gibbous) subacaule: foliis lutescente-viridibus patentibus ovatis semicylindricis, apice rarissimè carinatis. *Nob. in Syn. succ. p.* 226.

luteo-viride. 63. * M. (long pale gibbous) caule debili 2-3-entali, foliis oblongis semicylindricis, superne triquetris luteo-viridibus. *Nob. in Syn. succ.* 226.

perviride. 64. * M. (dark-green gibbous) caule debili 3-4-unciali: foliis semicylindrico-triquetris subovatisve perviridibus. *Nob. in Syn. succ.* 227.
Forte prioris varietas.

pubescens. 65. * M. (hoary gibbous) foliis pubescenti-canis sericeisve lævibus. *Nob. in Syn. succ.* 227.
Obs. Forma præcedentis, subsericeo-canum, oculo armato pubescens; caulis debilis trientalis, foliis semicylindris obliquis obtusisque, apicibus ut in affinibus.

17. Calamiformia, foliis numerosis teretiusculis virescentibus punctatis,

caule senecto erecto ramoso: floribus sordidè albicantibus, octagynis.

M. (white-flowered quill) foliis subulatis glaucescentibus, basi supra planis, floribus octagynis. *calamiforme.* *Linn. sp. pl.* 690.—*Dill. elth. f.* 228. 66.

M. (reversed quill) foliis obsubulatis crassis obtusis virescentibus. *Nob. in Syn. succ.* 208. *obsubulatum.* *Flores* non vidi. 67. *

18. Teretifolia, foliis teretiusculis virescentibus punctatis; caule senecto 2-6-unciali robusto procumbente: floribus formosis lætissimè rubicundis; dodecagynis plusve.

M. (cylindric quill) foliis triquetro-cylindricis subglaucis punctatis triuncialibus, junioribus glaucioribus subinde triquetris; caule senecto biunciali confertim ramoso. *Nob. in Syn. succ. &c. p.* 209. *cylindricum.* 68. *

M. (polished long quill) foliis quadriuncialibus subpunctatis virescentibus teretiusculis cylindricisve; junioribus politis perviridibus semiteretibus: caulibus senectis semipedalibus, cortice lævigato. *Nob. in Syn. succ.* 210. *teretifolium.* 69. *

M. (short roundish quill) foliis triquetro-teretibus farctis pergrossis virescentibus punctatis biuncialibus. *Nob. in Misc. nat. p.* 27, excluso synonymo *M. punctato. App. p.* 411. *teretiusculum.* 70. *

19. Bellidiflo'ra, foliis triquetris nullibi acutis, apice trifarie denticulatis; corollis plus minus rubicundis.

Bellidiflorum. 71. M. (Daisy-flowered) caudice senecto ramuloso unciali suffruticoso.

α *glaucescens* (small glaucous Daisy-flowered); lævigatum, foliis subglaucis.

M. Bellidiflorum. Linn. sp. pl. 690.—*Dill. elth.* 233. *fig.*

β *subulatum* (great green Daisy-flowered); foliis viridibus duplo majoribus. Mesem. subulatum: acaule, foliis subulatis triquetris, dorso supernè serratis. *Mill. dic. ed.* 8. *no.* 10.—*M. Bellidiflorum* β *simplex. Pl. gr. t.* 41.

Obs. Foliis virescentibus viridibusve, petalis albis costa rosea.

γ *viride* (pea-green Daisy-flowered); foliis læte viridibus, petalis roseis costa saturatiore.

Statura fere ut in γ, at foliis magis virentibus.

Communicavit amicus Dom. Aiton.

Burmanni. 72. * M. (Burman's Daisy-flowered) caulibus floriferis dodrantalibus, foliis glaucis sæpe recurvis; caudice simplici nullove, forteque annuo.

Mesem. folio triangulari, glauco, sæpe reflexo et aculeato, Bellidiflorum. *Burm. dec. tab.* 25.

Obs. Authoritate citatæ figuræ solum descripsi. Radix forte annua! Caules multoties longiores quam in vero M. Bellidifloro Dillenii.

20. Acuta, subacaulia, foliis semiteretibus subulatis incurvis pellucenter punctatis viridibus superne cari-

nato-triquetris; floribus alte rubicundis subdecagynis.

M. (great awl-leaved) foliis exactè semicylindricis pellucenter ad lucem, obsolete punctatis, minime rugosulis. *Nob. in Syn. succ. &c.* 207. —*M. subrostratum. Willd. n.* 529, synonymo excluso. *acutum.* 73 *

M. (middle spotted awl-leaved) læve: foliis plus semiteretibus superne triquetris, supra planis; punctis magnis pellucidis numerosis; apice albo minute cuspidatis. *punctatùm.* 74. *
M. punctatum. Nob. in Obs. mesem. 411.
Obs. Doct. Williams, Regius Profess. Bot. apud Oxoniam, benevolè communicavit.
Priore triplo minus, pallidius, lævius, lucidius.
Forte sequentis varietas major.
Flores mihi ignoti fortasse docebunt.

M. (small awl-leaved) læve lucidum: foliis semiteretibus apice triquetris, supra planis; punctis ad lucem numerosis mediocribus: apice mucronulo albo.—*Nob. in Syn. succ.* 230. *diminutum.* 75. *
Obs. Ultimi forte varietas, at duplo minor, foliis tenuioribus, punctis longè minoribus.
β *cauliculatum*; Mesem. cauliculatum: caulibus semierectis crassis ramosis firmis lignosis 3-4-uncialibus, demum decumbenti-subradicantibus: foliis biuncialibus semicylindricis grandè punctatis, supernè costatim obsolete subtriquetris, basi angustioribus. *Nob. in Suppl. succ.* 90.
Obs. Folia fere duplo longiora quam in α.
Forte mera planta senecta.
Obs. Var. pallida in *Suppl. pl. succ.* 99, mera planta imperfecta est.

CEPHALOPHYLLA: 2. Caule caudiceve subdodrantali decumbente perenni: foliis basi connatis longis angustis, capitato-congestis: floribus stramineis polygynis: calyce 5-phyllo. Genus si bonum, nomen Cephalophyllum propono. Forte duo genera.

21. CORNICULATA, foliis ad geniculos per paria, subinde cornuum taurinorum instar inflexis: floribus mediocribus stramineis.

† *Diversifolia*; foliis arcuatim incurvis, radicem s. geniculos magnos versus, sæpe valde elongatis lineâ basi elevatâ, semper obtusè triquetro-cylindricis: petalis stramineis, dorso plus minus aurantio-rubro, stylis circiter 16: foliolis calycinis latis brevibus subæqualibus.

loreum. 76. M. (leathery stalked) foliis capitato-confertissimis semicylindrico-triquetris elongatis recurvis subglaucis: caulibus senectis teretiusculis gracilibus dealbatis.

M. loreum. Dill. elth. f. 255: sed vix *Linnæi spec. pl.*, quod gaudet foliis basi gibbis, et flore purpureo. *Nob. in Syn. succ.* 229.

β *congestum*; foliis capitato-confertissimis elongatis triquetris rugosulis viridibus longitudine variis, imis subinde longissimis. *Syn. succ. l. c.*

diversifolium. 77. * M. (short horn-leaved) robustius: foliis capitato-confertis elongatis triquetro-semicylindicis subrecurvis glaucis viridibusve, imis subinde per pa-

ria, longissimis: caulibus angulatis rubro-luteis. *Nob. in Syn. succ. p.* 230.—*Dill. elth. f.* 252. —*M. corniculatum* β. *Willd. sp. pl.* 2. *p.* 1041.

Variat

α *majus;* foliis confertis glaucescentibus robustioribus sæpe valde incurvis.

Florebat in horto Nov. 1820.

E regio horto Kewense, a Capensibus seminibus ortum, A.D. 1819.

Corolla mediocris antemeridiana sulphurea petalis extus costâ rubro aurantiâ.

β *glaucius;* paulo minus: glaucum: foliis confertissimis magis incurvis, sæpe fere in semicirculum.

Viget in regio horto Kewense, e C. B. S.

γ *brevifolium;* ultimo simillimum, at foliis confertissimis duplo brevioribus.

E regio horto Kewense, a C. B. S.

Florebat in horto in Augusto.

Flores terminales ternati; fere ut in M. loreo, petalis sulphureis costâ extus latissime rubro-aurantiâ.

δ *læte-virens;* foliis subconfertis, minus incurvis quam in prioribus pallide-viridibus.

ε *atro-virens;* foliis subconfertis incurvis ut in δ, saturate viridibus, petalis stramineis, costâ extus rubro-aurantiâ.

†† *Homophylla;* caulibus subsarmentaceis, ad nodos baseque subinde incrassatis: foliis centralibus et ad nodos congestè capitulatis longis gracilibus subincurvantibus, minute ad lentem ruguloso-pellucenter

punctatis viridibus: stylis 12-20: cæteris ut in Diversifoliis supra.

decipiens. 78. * M. (middle horn-leaved) foliis subconfertis longis sub-arcuato-adscendentibus semicylindrico-triquetris viridibus nitidis, minutim creberrime rugulosis; caulibus prostratis subdistantibus nodis.

Obs. From the garden of the Earl of Tankerville at Walton, pointed out by his Lordship's gardener, Mr. Richardson, as a new Cape species in 1820, which at first I supposed was the case. The leaves are less curved than those of the last species, of which I once thought it a variety; and both the leaves and joints are longer than in the next species, to which in fact it is most nearly allied; but still appears distinct. It is too young as yet to flower.

dubium. 79. * M. (dubious horn-leaved) foliis confertis longiusculis arcuato-erectis semicylindrico-triquetris viridibus nitidis: nodis contiguis: stylis duodecim. *Nobis in Syn. succ.* 231.—*Pet. gaz.* 77. *f.* 10?

Obs. Folia longe breviora, magisque conferta quam in sequentibus.

corniculatum. 80. M. (long horn-leaved) foliis subconfertis triquetro-semicylindricis longissimis glaucis incurvantibus: caulibus vix angulatis nodis distantibus. *Nobis in Syn. succ.* 231.—*Dill. elth. f.* 254.

Obs. Styli 13, recurvantes.

β paulo minus.

Apud Kew.

γ *isophyllum.*

M. corniculatum α, isophyllum. Pl. gr. 108. cum icone.

Obs. γ forte propria species, internodiis longioribus, corollis minoribus luteis, extus rufescentibus: foliis brevioribus magis curvatim corniculatis. Propria species? Vix vidi.

M. (purple-jointed) foliis per paria incurvo-corniculosis semicylindrico-triquetris glaucescentibus; caulibus flexuosis procumbentibus. *procumbens.* 81. *

M. dubium. Salm. catal. hort. dyck. p. 22.
Sub hoc nomine ipse Princeps communicavit A. D. 1820.

Obs. M. tricoloro proximum, at differt ut supra; et *folia* breviora magis expansa, internodiis paulo solum longiora. *Caules* angulosi striatuli rufo-lutescentes, geniculis (basi foliorum) et summis caulibus, aëre aperto purpureis.

M. (tricoloured) foliis exacte cylindricis tripollicaribus acutis viridibus: stylis viginti. *Nob. in Syn. succ.* 233. *tricolorum.* 82. *

Obs. Styli breves circiter 20, expansi. Petala straminea, basi sanguineo-purpurea. *Antheræ* fuscæ.—Hoc est (secundum *Hort. dyck.*) M. stramineum *Willd. enum. p.* 533.—sed ejus M. tricolor est M. pyropæum, *Nob. in Suppl. pl.* 99.

22. Capitata. Palmarum habitus. *Caudex* suberectus; senectus 2 uncias ad 3 pedes altus, rarissimè ramulosus (floriferis ramis mox morientibus exceptis). *Folia* densissimè alterneque imbricato-carnosa terminalia triquetra semiteretiave. *Rami floriferi* axillares subverticillati; decumbentes ex onere bracte-

arum densè alternarum omnino folii formarum et pedunculorum nudorum 3-4-entalium terminalium. *Calyx* 5-fidus, floribus polygynis maximis stramineis, petalis angustissimis, deorsum plus minus pube ciliatis.

pugioniforme. 83. M. (great dagger-leaved) foliis glaucis subpedalibus triquetris, angulis dilatantibus late sulcatis; caudice suffruticoso simplice.

M. pugioniforme. Linn. sp. pl. 699.—*Dill. elth. f.* 269.

β *carneum. Breyn. cent. pl. p.* 164, *flore carneo.*

γ *purpureum. Breyn. cent. pl. p.* 164, *flore purpureo.*

Habitat C. B. S. — Duplo majus quam sequentibus.

δ *bienne* (biennial dagger-leaved) foliis subglaucis dodrantalibus triquetris; caudice subbienni simplice debiliore.

M. pugioniforme. Nob. in Syn. succ. &c. 228.

Obs. Priore minus, debilius.

capitatum. 84. * M. (lesser dagger-leaved) foliis subglaucis 6-7-uncialibus triquetris; caudice senecto suffruticoso simplice.

M. capitatum. Nob. in Syn. succ. &c. 228.—*Bot. reg.* 494.

M. pugioniforme (short leaved). *Nob. obs. mesem.* 390.

Habitat in Insula Van Diemen, secundum Whitley, Brames et Milne, qui communicaverunt. Statura fere prioris, at fere duplo minus.

β *ramigerum* (branching dagger-leaved); foliis numerosissimis tenuibus subglaucis semipedalibus

triquetris; caudice senecto tripedali fruticoso ramulis paucis sparsis erectis veris, capitulis foliorum verum finientibus.

Vigebat in Horto Chelseiano A.D. 1817 &c. et semper ramulos veros gerit. *Flores* ut in priore.

M. (dwarf dagger-leaved) foliis virescentibus 3-4-unciallibus triquetris: caudice senecto biunciale simplice erecto.—*Nob. in Suppl. pl.* 91. *brevicaule.* 85. *

Chrysanth. aizoid. &c. minus flore flavo. Breyn. cent. 165.

Obs. A semine facile crescit, et non variat. Prioribus 2-6-plo minus, foliis toto viridibus usque ad basin. Priora omnia semper habent folia basi plus minus læte purpurascentia.

Habitat C. B. S. copiosè secundum Dom. Burchell, at non in eodem loco cum prioribus. Genuina species, a semine constans.

Obs. It appears on a recent re-examination and cultivation, that we have five or six species or sub-species of dagger-leaved Mesembryanthema greatly resembling each other; but which keep distinct from seeds in our gardens, and which cannot indeed be increased in any other manner, except in the sub-species ramiger, which may perhaps be propagated from its true branches; for I have once known the head of pugioniforme grow, cut off *beneath* the leaves; but the plant itself, although a fine one, and carefully treated, died in consequence of the decapitation.

M. (glittering dagger-leaved) foliis pugioniformibus longis coruscantibus: caudice fruticoso perenni.—*Nob. in Suppl. pl.* 90. *coruscans.* 86. *

M. (tuberous long-leaved) foliis glauciusculis subspithameis obtuse triquetris canaliculatis vel *elongatum.* 87. *

semiteretibus; caudice debiliter flexuoso 3-4-unciali; radice magna tuberosa carnosa.

α *grandiflorum;* corolla 5-unciali odore hircino, petalis subcapillaceis pube longâ flexuosâ ciliatis.

β *minus;* corolla 4-unciali, odore subhircino, petalis exterioribus deorsum pilis rectis brevibus paucissimis nudo oculo vix manifeste ciliatis.

M. elongatum β. Bot. reg. 493.

γ *fusiforme;* radice fusiformi.

M. fusiforme. Nob. in Misc. nat. 41.—*Breyn. cent.* 162. *t.* 80.

REPTANTIA: 3. Caulibus senectis suffrutescentibus plus minus decumbenti-prostratis sive reptantibus, angulosis: calyce 5-phyllo; floribus (uno excepto) rubicundis polygynis; foliis basi connatis acutè triquetris.

23. SARMENTOSA (Sarmentose *Salm. tent. bot.*) caulibus decumbenti-prostratove-sarmentosis, ad nodos sæpius radicantibus: floribus e ramis lateralibus ternatis parvis bibracteatis; petalis roseis lineâ dorsali rubrâ: foliis triquetris, punctatis minutissime serrulatis omni margine.

gemini-florum. 88. * M. (small, pale, uncinate) ramis elongatis gracilibus, effuso-valde reptantibus: foliis subæquilateri-triquetris viridibus, apice extus aduncülis: floribus ternatis geminatisve.

M. geminatum. Jacq. frag. 50, *nec Nob. in Misc. nat.* 92.—*M. geminatum. Salm. tent. bot.* 28, *nec* 31.

Habitat C. B. S.

Benigne communicavit illustr. Princeps de Salm Dyck 1819, cum florum delineatione et ipsis floribus, at propter iter morientibus.

M. (short-jointed subuncinate) foliis æqualiteri-triquetris glaucescentibus punctulatissimis apice rectis, internodiis longioribus, marginibus minime serrulatis: caulibus firmis procumbentibus. *simile.* 89. *

Habitat C. B. S.

Vigebat in regio horto Kewense A. D. 1819.

Priori simillimum, at duplo majus, sed ramis longe brevioribus.

Flores non vidi.

A sequente differt brevioribus et crassioribus internodiis.

E regio horto Kewense, a Capensibus seminibus ortum, A. D. 1819.

M. (slender, long-jointed) foliis connatis compresso-triquetris perviridibus tuberculato-punctatis, internodiis sæpe brevioribus; margine carinaque tenuissime denticulatis: ramis gracillimis effusis reptantibus. *laxum.* 90.

M. laxum. Willd. enum. p. 536.

Habitat C. B. S.

Communicavit illustris Princeps de Salm Dyck.

M. (great weak-stemmed Sarmentose) sarmentis sesquipedalibus gracilibus laxulis radicantibus: foliis confertis compresso-triquetris læte-viridibus, marginibus minime exasperatis. *Nob. in Syn. succ.* 238. *sarmentosum.* 91. *

Obs. Caules foliaque duplo crassiores quam in priore.

rigidicaule. 92. * M. (large-leaved, stiff-stemmed Sarmentose) foliis longis æquilateri-triquetris rectis, margine asperiusculo; caule firmo procumbente (non pendulo).

Viget in regio horto Kewense, a seminibus Capensibus ortum, A. D. 1819.

Schollii. 93. * M. (large, rough, recurved) foliis compresso-triquetris magnis recurvis serrulato-asperrimis; senectis caulibus firmis decumbenti-sarmentiformibus.

M. recurvum. Nob. in Suppl. pl. 90.—*M. Schollii.* Sarmentoso-caulescens foliis connatis, triquetris, patenti-recurvatis, punctatis, angulis lateralibus et carina superne serrulatis. Floribus ternatis, pallide rubicundis, bibracteatis. *Salm. tent. bot. p.* 10. *A. D.* 1820.—*M. aduncum. Jacq frag. t.* 51. *f.* 2. Nec Aliorum.

Obs. The Prince de Salm Dyck proposing to name this conspicuous species after its excellent discoverer Mr. Scholl (who sent so many Cape plants to Europe), I have readily relinquished my prior name of *recurvum;* and cheerfully joined in thus meeting the wishes of those to whom the whole business of succulent botany is so much indebted.

24. Rubricaulia (*Salm. tent. bot.*). Ramis senectis decumbenti-humifusis, sarmentiformibus; foliis subacinaciformiter triquetris, angulis serrulato-asperis: floribus sæpe solitariis bibracteatis mediocribus roseis.

filamentosum. 94. M. (humble, crowded, green) foliis læte-viridibus confertis crassis compresso-triquetris subacina-

ciformibus punctatis, marginibus serrulato-asperis internodio longioribus: caulibus decumbentibus brevibus contiguis. *Nob. in Syn. succ.* 238. —*Dill. elth. f.* 273.

M. (crowded rosy-stalked) foliis compresso-triquetris subacinaciformibus subglaucis, margine minime serrulatis vix cartilagineis, internodio sæpius longioribus: ramulis erecto-decumbentibus contiguis. *Nob. in Syn. succ.* 239. *serrulatum.* 95. *

Obs. Rami asperiusculi, juniores purpurascentes.

α *glaucum*; foliis glaucioribus, styli subocto. Longè elatius et minus decumbens quam M. filamentosum, et glaucius.

β *viridius*; foliis viridioribus, ramis junioribus minus purpurascentibus.

Flores non vidi.

M. (slender, deep red-stalked) gracilius: foliis subcompresso-triquetris virescentibus rugosiusculis marginibus cartilagineo-serrulatis internodio sæpius brevioribus: ramulis oppositis ruberrimis. *Nob. in Syn. succ.* 239. *rubricaule.* 96. *

Variat

α *gracilius* (slender, deep red-stalked); ramulis ruberrimis, foliis distantioribus, glaucioribus, stylis quinque.

β *densius* (crowded red-stalked); ramis foliisque paulo densioribus, ramulis junioribus minus intense rubentibus, floribus ignotis.

γ *subvirens* (tall, green, red-stalked); foliis subæqualiteri-triquetris viridibus virescentibusve, marginibus exasperatim serrulatis: caulibus decumbenti-prostratis longis, ramis distantioribus: floribus ignotis.

E regio horto Kewense, a Capensibus seminibus ortum, A. D. circa 1818.

Obs. Hæc varietas fere est intermedia inter M. serrulatum et M. rubricaule; et ultimi potius varietas.

25. Acinaciformia: caulibus procumbentibus prælongis demum radicantibus: foliis magnis e triquetro-rectim acinaciformibus: floribus solitariis terminalibus maximis.

acinaciforme. 97. * M. (great scymetar-leaved) foliis acinaciformibus, marginibus subcrispatim undulato-scabris.
M. acinaciforme. Linn. sp. pl. 695.—*Dill. elth. f.* 270-271.
α breve; ut supra, ramis brevioribus.
Accepi, e horto Oxoniense, a Regio Professore Williams.
β longum; ramis longioribus, foliis parum minoribus: floribus rarissimis.
Priore plus duplo longius, foliis parum forte minoribus; rarius, vel nunquam in hortis floret.

lævigatum. 98. * M. (great smooth scymetar) foliis acinaciformibus lævigatis glaucis marginibus cartilagineis integris. *Nob. in Syn. succ. p.* 233.
Obs. Margines integri non colorati.
M. glaucescenti infra simillimum, at 2-3-plo majus.

rubrocinctum. 99. * M. (red-edged scymetar) foliis acinaciformibus, marginibus carinaque asperis rubris. *Nob. in Syn. succ.* 234.
Obs. Ab ultimo discrepat, marginibus rubris asperis—a penultimo, non undulatis.

Variat
α *crassum;* foliis glaucioribus crassioribus, rufo-cinctis.
β *compressum;* foliis magis compressis, minus rufis. A Domino Law.
γ *tenerum;* ramis paulo longioribus, foliis compressis ut in β, at magis rufo-cinctis, viridioribus.
M. lævigato forte nimis affine, at margines, certe asperiores, et aëre aperto rubicundi.
Varietas γ frigoris magis impatiens est quam priores.

M. (red-pitted scymetar) foliis compresso-triquetris acinaciformibus æquilateralibusque, margine omni scabriusculo. *Nob. in Syn. succ.* 235. *subulatum.* 100. *

Obs. A præcedentibus dignoscitur foliis minus carinatis (et e frigore marcescente-rufo-punctatis) foliisque junioribus æquilateralibus—et a sequentibus duobus in foliis adultis compressis, acinaciformibus, sine pustula.

M. (blistered rectangular) foliis adultis æquilateri-triquetris viridibus subincurvis triuncialibus basi intus pustulatis; carina serrulata;—lateribus asperiusculis. *edule.* 101.

M. edule Linn. sp. pl. 695.—*Dill. elth. fig.* 272.

Obs. A section of the prismatic leaf forms a right-angled triangle.

M. (lesser, Eatable) foliis subbiuncialibus acute triquetris, senectis compressis carina supernè ustulatim serrulata. *Nob. in Syn. succ.* 235.—*M. acinaciforme. Pl. gr.* 89, *nec Aliorum.* *dimidiatum.* 102. *

Folia duplo breviora quam in priore, at fere eadem latitudine.

In Anglia planta deleta.

glaucescens. 103. * M. (soft glaucous scymetar) foliis junioribus subincurvis æquilateri-triquetris mollibus glaucis, margine subcartilagineo-albo læviusculo; caulibus decumbenti-prostratis robustis, summis sulco exaratis: floribus solitariis sessilibus; stylis septem. *Nob. in Syn. succ.* 236.

Obs. Calyx 5-fidus subsessilis. Folia adulta compresso-triquetra acinaciformia.

Rossi. 104. * M. (small red-pitted scymetar) foliis acinaciformibus s. compresso-triquetris glaucescentibus, margine subcartilagineo roseo læviusculo: caulibus decumbenti-prostratis.

A seminibus e Van Diemen's Land, ortum, A. D. 1820, a Dom. Gulielm. Ross, apud Stoke Newington, qui mihi communicavit.

Obs. Priori simillimum, sed longè gracilius. *Caules* 3-pedales et ultra, demum prostrati valde ramosi; *foliis* omnibus magis acinaciformibus s. compressis acutioribus durioribus, et aëre aperto magis frigoris impatientibus, indeque altius rufo-marginatis, et singulariter marcescenti rufo-maculatis; exactè ut in M. inæquale, infra. Variat foliis glaucioribus et gracilioribus, ramulis confertioribus magisque acinaciformibus, marginibus rubris.

Flores non vidi.

virescens. 105. * M. (greenish small scymetar) foliis subæquilateri-triquetris subvirescentibus; caulibus decumbenti-prostratis; pedunculis terminalibus solitariis alato-ancipitibus; stylis octo. *Nob. in Syn. succ.* 236.

æquilaterale. 106. * M. (equal-angled) foliis subæquilateri-triquetris virescentibus, marginibus lævibus cartilagineis; caulibus debilibus prostratis. *Nob. in Syn. succ. p.* 237.

OBS. *Flores* rarissimi e ramis lateralibus. *Styli* 6.
β. paulo majus et brevius, sæpius florens. *Syn. succ. l. c.*

M. (smooth-edged upright green) foliis compresso-triquetris subacinaciformibus lævibus punctatis viridibus, basi interne subpustulatis, carina apice asperiusculo. *virens.* 107. *

Viget in regio horto Kewense, a seminibus Capensibus ortum, A. D. 1821. G. H. ♄.

OBS. Ab omnibus valde distinctum, et forte magis affine M. glaucescenti; sed minus, erectius, lævius et viridius. *Folia* in seminalibus plantis 6-12 lineas longa valde acinaciformia, et simulantia M. maximi folia, sed altè viridia punctis longe majoribus. *Caules* in junioribus, quæ solum vidi, semipedales erecti, ramulis vix patulis; in senectis forte decumbentibus, ramulis patentibus.

26. HUMILLIMA, ramis ramulisque omnino prostratis minoribus, facillime semper ad nodos reptantibus: foliis parvulis tereti-triquetris incurvis subinde subacinaciformibus, clavatisve: sæpius confertis.

M. (small rough glaucous creeping) foliis glomeratis triquetris acutis glaucis, punctis magnis pellucidis scabris: caulibus filiformibus debilissimis. *reptans.* 108.

M. reptans. Hort. kew. ed. 1. *v.* 2. *p.* 185.

Flores imperfectos solitarios solum vidi, autumnales.

australe. 109. M. (small smooth glaucous creeping) foliis glaucescentibus punctato triquetris incurvantibus lævibus.
M. australe. Hort. kew. ed. 1. *v.* 2. *p.* 187.
M. demissum. Willd. enum. suppl. 36.

crassifolium. 110. M. (small green creeping) foliis triquetris impunctatis lævibus perviridibus basi semicylindricis.
M. crassifolium. Linn. sp. pl. 693. — *Dill. elth. f.* 257.
β. paululum majus.

clavellatum. 111. * M. (club-leaved creeping) foliis confertis expansis obsolete triquetris farctis clavatis obtusissimis viridibus cum mucronulo. *Nob. in Misc. nat. p.* 79.—*Syn. succ.* 242.
β aggregatum ; ramis ramulisque longe densioribus seu confertis. *Syn. succ. l. c.*
γ minus ; foliis ramulisque brevioribus s. minoribus, congestis. *Syn. succ. l. c.*

humile. 112. * M. (dwarf triangular) foliis triquetris subulatis, calyce quadrifido, radice perenni.—*Nob. in Misc. nat. p.* 80.
α rubrum ; flore rubro.
Dwarf triangular red Fig-marygold. *Pet. gaz.* 88. 9.
β luteum ; floribus luteis.
Dwarf triangular yellow Fig-marygold. *Pet. gaz.* 88. 8.
Non vidi.
Folia opposita, vix rectim ternata ut in figuris citatis, quæ ramulos potius quam folia forte spectant.
E capite Bonæ Spei. Vix hujus sectionis.

PERFOLIATA: 4. Fruticuli foliis valdè connato-vaginantibus supernè sæpius triquetris, apicibus plerumque aduncis: floribus albis, rarius roseis; calyce 5-phyllo.

27. Forficata.

M. (denticulate scissar-leaved) foliis triquetro-compressis viridibus, apice spinulosis, caule ancipiti decumbente. *forficatum.* 113.
M. forficatum. Linn. sp. pl. 695.
Obs. *Caules* debiles suffrutescentes, ramuli semipedales.
Flores majusculi rubicundi.

28. Geminata, ramis geminatis, foliorum marginibus cartilagineo-albicantibus.

M. (white twin-shooted) foliis erectis albidis lævibus triquetris crassis, ultra medium connato-vaginantibus, margine cartilagineo; caule ereto trientali geminatim ramoso. *Nob. in Syn. succ.* 280. *geminatum.* 114. *
G. H. ♄.

M. (white-edged) foliis triquetris subacinaciformibus marginibus dealbatis, carina subdilatante. *Nob. in Syn. succ. &c.* 294. *marginatum.* 115. *

29. Rostellata.

M. (little prostrate beak) foliis rostellatim connatis semiteretibus subulatis recurvis punctatis viridibus: caulibus ramosis prostratis nodulosis. *Rostellum.* 116. *

Accepi e regio horto Kewense, (e C. B. S.) Jun. 1820.

Suffrutex palmaris et ultra, omnino anomalus, ramis subconfertis internodiis supernè tumidulis e vaginis crassis foliorum, et e senectute. *Flores* parvi solitarii in ramulorum furcationibus, pedunculis subuncialibus clavatis basi bibracteatis. *Calycis* laciniæ 5 subæquales longæ. *Corolla* antemeridiana albicans supernè alba rosea. *Styli* 5 ramentacei patuli. *Germen* 5-angulare.

30. Uncinata, suffrutices pedales ramosi: ramis junioribus uniformibus, senectis induratis carne evanescente; foliis triquetris punctatis connato-vaginantibus, internodiis toto carnosis (sine linea exarata), apice sæpe infernè plus minus denticulatim uncinatis: floribus axillaribus solitariis dilute purpurascentibus pallidis.

perfoliatum. 117. * M. (great hooked) foliis albidis crassis duris punctatis, sæpe apice inferne subtriacanthis: ramis paucis.

α *triacanthum;* foliis infernè sæpe triacanthis.

M. perfoliatum. Mill. dic. ed. 8. *no.* 19.—*Nob. in Misc. nat. &c.* 92.—*M. uncinatum* β. *Linn. sp. pl.* 692.—*Dill. elth. f.* 240.—*Brad. succ.* 46.

β *monacanthum;* foliis integris vel inferne apicem versus monacanthis. *Brad. succ. dec.* 3. *fig.* 26, *dextra.*

Forte idem cum α.

M. (toothless hooked) foliis triquetris subedentulis crassis contiguis brevibus. *edentulum.* 118. *
Mesem. foliis triquetris flore parvo rubente. *Burm. dec. t.* 26. *f.* 3.
Obs. The figure cited can hardly be intended to represent the preceding article. It is said to be used in Africa for tanning; for which indeed nearly all Mesembryanthema (and more especially the wiry wooded *PERFOLIATA*) will be found serviceable. The tanning principle resides chiefly in the subpellucid glandular dots of the leaves.

M. (small hooked) foliis albicantibus crassis punctatis apice recurvis, subtus sæpius monacanthis: ramis numerosis. *uncinellum.* 119. *
M. perfoliatum, fol. minorib. &c. Dill. elth. f. 239.—*M. uncinatum, minus. Cat. hort. dyck. A. D.* 1816 *et* 1818, *sed uncinatum, majus, A. D.* 1820.
Obs. Priore ramosius, longe gracilius, 4-plo minus.
Communicavit illustr. Princeps de Salm Dyck, A. D. 1819.

M. (greenish hooked) foliis virescentibus apice subtus diacanthis. *Nob.—Willd. et Decand. in Pl. grass.* synonymis cæteris exclusis. *uncinatum.* 120.
β *majus;* paululum majus, magisque punctatum. —*Brad. dec.* 3. *f.* 27, *sinistra.*

M. (slender hooked) ramis simplicibus gracilibus strictis duris, foliis triquetris punctatis albidis, dorso superne 1-4-dentatis. *semidentatum.* 121. *
M. semidentatum. Nob. in Suppl. pl. succ. 95.

Obs. M. perfoliato longè gracilius, magisque virgatum.
Flores non vidi.

viride. 122. * M. (deep-green) foliis integerrimis perviridibus lævibus crassis apicibus uncinato-recurvis. *Nob. in Syn. succ.* 283.

31. Vaginata, fruticuli 1-2-pedales dumosi, asperiusculi, duriores; foliis minus succulentis, marginibus carinaque sæpe exasperato-ciliatis, omnino uniformibus, vaginis utrinque lineolâ longitudinaliter sulcatis: floribus paniculato-dichotomis terminalibus minutis albis antemeridianis.

curtum. 123. * M. (smooth short-sheathed) erectum; foliis sæpe approximatis, incurvo-recurvulis lævibus viridibus, angulis supernè asperiusculis; vaginis sæpe abbreviatis. *Nob. in Syn. succ.* 334.

α. foliis læte viridibus crassioribus lævioribus.
Obs. Mesem. viride simulat, at duplo minus.
β *majus*; foliis magis glaucescente tinctura, angulis asperioribus: caulibus fortè elatioribus.
γ *politum*; prioribus varietatibus minus: lævius: foliis erectioribus brevioribus gracilioribus læte viridibus, minus incurvo-recurvulis, angulis asperioribus quam in α.
M. vaginatum β, *politum*: *Nob. in Syn. succ.* 284.
δ *minus*; ultimæ var. simillinum, at in omnibus duplo minus.

M. (rough sheathing) erectum: asperiusculum: foliis subuncialibus patentibus strictis, apice recurvulis, vaginisque virescentibus glabris, angulis supernè asperis. *Nob. in Syn. succ.* 284. *vaginatum.* 124. *

Obs. Ultimo minus, ramis magis patulis. Folia breviora glauciora magisque patula asperiora et strictiora, s. minus flexa.

α *asperum;* foliis ramulisque tactu asperioribus.

β *parviflorum;* foliis longioribus viridioribus lævioribus; floribus minoribus.

Forte cum α, varietas mera prioris.

Difficillimè determinare.

M. (small-flowered upright) foliis semuncialibus glabris suberectis, carina minime serrulata; caule tripedali ramisque erectis. *Nob. in Syn. succ.* 284. *parviflorum.* 125. *

Obs. Flores trilineares albi minimi.

M. (spreading-leaved, rigid) foliis subtrilinearibus horizontalibus vaginisque glabris, carina apice scabra; ramis rigidissimis subpatentibus. *Nob. in Syn. succ.* 283. *rigidum.* 126. *

Folia minuta; adulta in senectis sæpe deltoidea.

β *majus.*

M. (small rough decumbent) foliis trilinearibus ultrave subpatentibus tenuibus vaginisque ad margines scabris: ramis filiformibus decumbentibus. *Nob. in Syn. succ.* 283. *tenellum.* 127. *

Omnium Vaginatorum tenuius, ramis sæpius decumbentibus.

32. Lineata, characteribus ultimæ Sectionis, at foliis gradatim deorsum minus vaginantibus, (vaginis

lineâ longâ impressis) triplo longioribus, lævibus glaucis remotis, apicibus aduncis: caulibus senectis erectis firmis tripedalibus ultrave.

imbricatum. 128. * M. (dense erect-branched) foliis subcompresso-triquetris glaucescentibus subuncialibus, ramisque erectis numerosis; calycibus turbinatis. *Nob. in Syn. succ.* 285.—*Ait. kew. ed.* 2. *v.* 3. *p.* 348.

α *minus*; (small) foliis 6-9-linearibus obtusis glaucescentibus.

β *medium*; (the blunt, crowded) foliis glaucescentibus obtusis uncialibus, calycibus turbinatis.

γ *viride*; (upright dull green) foliis acutioribus viridibus sesquiuncialibus, ramisque erectioribus.

M. imbricatum β majus. Synops. succ. l. c.

Obs. Flores non vidi.

E regio horto Kewense, a C. B. S., cum α et β.

multiflorum. 129. * M. (glaucous-leaved) foliis subcompresso-triquetris glaucis, ramulisque patulis.

α *majus*; (great white) foliis sæpe bipollicaribus præglaucis, calycibus cylindricis basi attenuatis. *Nob. in Syn. suppl.* 285.

β *minus* (lesser white); foliis sescuncialibus glaucis, calycibus turbinatis basi valde attenuatis.

γ *rubrum* (red-flowered); foliis obsolete triquetris 1-2-uncialibus virescentibus, floribus (in siccis nativis) rubicundis, supra ramos pyramidatim cymosis. *Nob. in Suppl. pl. succ. p.* 95.

Plantam vivam, et flores siccatos, cum Dom. Burchell solum vidi.

δ *patens* (single-flowered); M. patens, foliis teretiusculis connatis punctatis, floribus terminalibus solitariis, calycibus laciniis subæqualibus,

caule erecto patente. *Willd. enum. suppl. p.* 37.

Frutex 2-pedalis et altior: folia viridi-subglaucescentia 12-15 lineas longa. *Willd. l. c.*

Forte eadem cum var. *α*. Vix.

Nuper communicavit illustris Princeps de Salm Dyck.

ε *nitens* (spreading bright green); lævigatum: foliis subcompresso-triquetris viridibus acutis subnitentibus, ramisque patulis.

Obs. In M. imbricato et multifloro folia non ullo modo nitentia; in hoc plane ad lucem nitent, et quasi lævigata, magisque cum ramis patentiora, et absolute viridia.

Flores non vidi.

Forte propria species.

33. Tumidula, foliorum vaginis apice solum carnoso-tumidulis, exaratâ lineolâ: cæteris ut in ultima Sectione.

M. (white-umbelled) foliis remotis teretiusculis subglaucescentibus scabrido-punctatis gracilibus 2-uncialibus, apicibus recurvis: vaginis apice tumidis, floribus albis. *Linn. sp. pl.* 689.—*Dill. elth. f.* 266. *umbellatum.* 130.

β apetalum.

M. anomalum. Willd. en. 531, *ejus Sup.* 36.

M. (slender red-flowered) foliis remotis virescentibus lævibus subsescuncialibus, apicibus subrecurvis; vaginis apice tumidulis, ramis patentibus; corollis rubicundis. *Nob. in Syn. succ.* 286. *tumidulum.* 131. *

β *minus*; foliis paulo minoribus.
E regio horto Kewense A.D. 1819.

foliosum. 132. * M. (many-leaved red-flowered) foliis subglaucis lævibus confertis obtusis uncialibus, mucronulo subrecurvo, vaginis apice incrassatis; floribus rubicundis. *Nob. in Syn. succ.* 287.

34. Lineolata.

lineolatum. 133. * M. (tumid sheath) foliis connatis incurvo-recurvulis obtusis, carina apice asperiuscula; basi lineola vaginali impressa.

Habitat C. B. S. G. H. ♄.

Obs. Prioribus vix, neque ulli vere, affine; at gaudet foliorum vaginis apice tumescentibus, lineolâ exaratâ:—*Fruticulus* primi anni vix semipedalis ramosus depressus. *Ramuli* patuli subconferti: juniores compressi læves. *Folia* parva vix uncialia numerosa conferta subglauca, ad lucem punctulata, atque ad lentem punctis confluentibus, subæquilateri-triquetra, submucronulata, pallide marginulata; internodiorum sub-longitudine; vaginis supernè solum minime tumidulis, lineolâ brevi impressâ.

Cum β et γ, e regio horto Kewense A. D. 1819, a C. B. S.

Accepi etiam ab amico Parmentier Equite.

Nondum floret.

β *minus*; foliis subæquilateri-triquetris confertis incurvo-recurvulis subacinaciformibus submucronulatis, margine omni supernè asperiusculo.

M. læve; foliis trigonis lævibus, caule decumbente articulato. *Thunb. Prod.* 90?

Obs. Var. α simillimum, at duplo minus, ramulis

subdecumbentibus, foliis glaucioribus longissimè confertioribus, semilineam longis, et internodiorum semper longioribus.

γ *nitens;* duplo minus quam α, foliis nitentibus viridioridus.

Nondum floret.

A sectione FALCATIS, insertione foliorum solum discrepat. Ad MICROPHYLLA quoque spectat; sed per vaginas apice tumescentes, lineolamque exaratam satis recedit.

DELTOIDEA: 5. Suffrutices: foliis plus minus deltoidibus s. subacinaciformibus; floribus rubicundis.

35. MEGACEPHALA, foliis distinctis deltoideo-acinaciformibus, germinibus cum calyce 5-phyllo valde incrassatis: petalis parvis tenuissimis includentibus. Genus proprium?

M. (serrate) foliis subulatis triquetris punctatis angulo carinali retrorsum serratis. *Linn. sp. pl.* 696.—*Dill. elth. f.* 238. *serratum.* 134.

OBS. Planta rariss. potiusve oblita; a me amicisve nondum visa.

M. (ragged-keeled) foliis glaucis compresso-triquetris gladiiformibus; carina cartilagineo-lacerata, petalis calyce maximo longioribus. *Nob. in Syn. succ.* 293.—*M. gladiatum. Jacq.*, secundum *Tent. bot. p.* 30, *a Principe de Salm Dyck.* *lacerum.* 135. *

OBS. *Folia* ad lentem parce at obsolete punctata.

heteropetalum. 136. * M. (various petalled) foliis confertis impunctatis glaucis breviter falcato-gladiiformibus, angulis cartilagineis, carina lacera; petalis calyce vasto brevioribus. *Nob. in Syn. succ. p.* 294.

α. corollis exiguis miseris albis.

β. corollis exiguis miseris pallide roseis.

glaucinum. 137. * M. (glaucine) foliis confertissimis compresso-triquetris brevissime acinaciformibus glaucescentibus integris subcartilagineo-marginatis subpunctatis. *Nob. in Suppl. succ.* 97.

Sequenti nimis affine.

Variat

α *angustum;* foliis gracilioribus, angulis ad lucem subcartilagineo-marginatis.

M. mutabili simillimum; sed differt, glauco s. farinoso colore, et præcipue in foliis maturis non æquilateri- sed compresso-triquetris, et longioribus angustioribus, necnon minus ad lucem cartilagineo-marginatis: corollis innuptis dilutissime roseis, albis antheris.

β *crassum;* foliis crassioribus glaucioribus.

Obs. *Flores* magis pedunculati quam in M. mutabili. *Pedunculi* triangulares. *Petala* semper patentia at magis ad solem, pluriserialia inæqualissima angustissima, filamentiformia semper rosea, non primo alba, dein rosea, ut in M. mutabili. *Fibrillæ* (s. petala interiora) numerosissimæ petalis veris multoties breviores, subulato-capillares recurvæ luteæ. *Stamina* s. filamenta vera antherifera summo calyci inserta brevissima, et cum antheris albida; intima innupta lutescentia. *Antheræ* oblongæ. *Pollen* non vidi. *Calyx* prægrossus 5-fidus subæqualis, et *Styli* breves grossi fere ut in M. mutabile.

Ab Oxonia communicavit Professor Regius Williams.

M. (changeable) foliis distinctis confertissimis subæqualiteri-triquetris brevissimè acinaciformibus viridibus punctatis cartilagineo-marginatis. *Nob. in Syn. succ.* 294.—*M. filamentosum. Pl. gr.* 60. *mutabile.* 138. *.

Calyx, germen et flos præcedentis, at petala primo albicantia s. luteo-alba, nuptata denique rosea luteis antheris; odore Cratægi oxyacanthæ.

M. (open-flowered) foliis subdeltoidibus lævibus perviridibus, carina gibbosa integra; petalis inclaudentibus, interioribus imbricatis abbreviatissimis. *Nob. in Syn. succ.* 295. *inclaudens.* 139. *

Eximia species, hodie ubique florens.

36. Muricata, foliis triquetrisque trifariam denticulatis, deltoidibus, impunctatis.

M. (smooth-keeled Delta) foliis confertissimis glaucis longè triquetro-deltoidibus, lateribus minime dentatis, carina integra. *caulescens.* 140. *

M. caulescens. Mill. dic. ed. 8. *no.* 12.—*Dill. elth. f.* 243-4.

M. (great Delta) foliis confertis glaucissimis triquetro-deltoidibus trifariè dentatis; carina bractearum foliolisque calycinis integris.—*Nob. in Misc. nat. &c.* 296.—*Dill. elth. f.* 245-7. *deltoide.* 141.

M. (small Delta) foliis confertis deltoidibus bracteis foliolisque calycinis triquetris subglaucis trifarie denticulatis. *Nob. in Syn. succ. &c.* 297.—*Dill. elth. f.* 245 et 247. *muricatum.* 142. *

β *minus;* foliis paulo minoribus, denticulis aëre aperto forte magis rubicundis.

37. Microphylla, foliis aggregatis connatis punctatis brevissimis acute triquetris edentulis, exsiccatis subinde laceratim ciliiformibus. Fruticuli minimi biunciales dense ramulosi (uno 6-unciali solum excepto).

micro-phyllum. 143. * M. (small green-leaved) foliis triquetris acuminatis subaristatis viridibus, intus basi pustulatis: ramulis confertissimis. *Nob. in Syn. succ. p.* 297.

Obs. Foliorum carina subinde minutim subserrulata.

mucro-natum. 144. * M. (bristle-pointed) foliis oblongo-ovatis acutis glaucescentibus, apice triquetris mucronulo niveo. *Nob. in Syn. succ. p.* 297.

pyg-mæum. 145. * M. (pygmy connate-leaved) foliis basi connatis oblongo-ovatis semiteretibus muticis; hyemalibus fere ad apicem junctis *Nob. in Suppl. pl.* 99.

Obs. Fruticulus 3-entalis ramulosus, ramulis robustulis divaricantibus cinereis. *Folia* æstivalia potiusve autumnalia duo solum ad apicem singuli ramuli, basi solum connata, at inter hæc ante hyemem tria paria ad apices fere connata distichè progrediuntur; quæ circa æstatem sequentem marcescunt, et persistunt cinerea, donec per alia vernalia minus connata folia ruptata sunt, relinquentia nervos persistentes cinereos ciliiformes, circum basin novorum foliorum. Hinc, cum charactere Mesem. ciliati op-

timè quadrat: sed vix idem. Hinc quoque octo folia ad apicem singuli rami in singulo anno per paria quasi producuntur.

M. (small-leaved grey) foliis acute æquilateri-triquetris subcymbiformibus canis obsoletè punctatis ciliato-pubescentibus, mucronulo recurvò: caulibus decumbentibus. *canescens.* 146. *

M. pulchellum. Nob. in Syn. succ. 298, corolla pulchella.

β *revolutum* (revolving branched); foliis crassioribus paululum: ramis primò e semine strictis, sed secundo anno revolute-recurvantibus; floribus ignotis.

Varietas singularis, e regio horto Kewense, a Capensibus seminibus orta, A.D. 1819.

Obs. The name of *pulchellum* for this small species (from its smart little flower) has been objected to by judicious botanists, on account of the rude appearance of its numerous decaying hoary and persistent leaves: it therefore now assumes the name of *canescens.*

TRIQUETRA: 6. Suffrutices: foliis plus minus triquetris distinctis, calycibus 5-phyllis, stylis 5.

† floribus rubicundis.

38. Lunata, foliis lunatis glaucissimis compressis exactè incurvo-lunulatis: floribus numerosis parvis roseis.

M. (great, crescent-leaved) foliis magnis confertis præcompresso-triquetris incurvo-lunatis glaucis- *maximum.* 147. *

simis: caule lignoso erecto dumoso. *Nob. in Syn. succ.* 292.

lunatum. 148. M. (small, crescent-leaved) foliis parvis confertissimis subconnatis compresso-triquetris arctissime incurvo-lunulatis caule erecto, ramis aggregatis.
M. lunatum. Willd. enum. 538.—*Salm. tent. bot.* 31.
Flores non vidi, at audivi, pallidè roseos.

falcatum. 149. M. (small, sickle-leaved) foliis minutis distinctis compresso-triquetris falcatis; ramulis numerosis filiformibus.
M. falcatum. Linn. sp. pl. 694.—*Dill. elth. f.* 275.

39. Pallidiflora, foliis mediocribus obtusè compresso-triquetris incurvis angustè acinaciformibus punctatis glaucis glabris: ramis densis patulis: floribus terminalibus solitariis magnis, sæpius pallide rubicundis. Difficillima sectio.

decumbens. 150. * M. (dwarf, pale-flowered) foliis valde compresso-triquetris perglaucis utrinque attenuatis incurvis, ramis confertissimis decumbentibus. *Nob. in Obs. Mesem. p.* 352.
Obs. *Flores* 2-unciales, fere albicantes, omnium rubicundorum dilutissimi.

incurvum. 151. * M. (incurved) foliis compresso-triquetris perglaucis utrinque attenuatis acinaciformibus, caule erecto, ramulis teretibus gracilibus effusis foliosis. *Nob. in Syn. succ.* 300.

Obs. Flores sæpe magis rubicundi quam in priore.

Valde variat.

β *dilatans* (gibbous-keeled) ; foliis triquetris incurvis subgracilibus perglaucis paucis inferne gibboso-dilatantibus, senectissimis deflexis. *Nob. in Syn. succ.* 300.

γ *pallidius* (pale flowering) ; floribus parum pallidioribus. *Syn. succ. l. c.*

δ *densifolium* (dense lesser-leaved); foliis paulo minoribus valde confertis.

E regio horto Kewense, a C. B. S., A.D. 1819.

ε *roseum* (rosy), foliis triquetris obtusis distinctis, basi attenuatis, glaucescentibus pellucido-punctatis, floribus terminalibus solitariis, petalis emarginatis.

M. roseum. Willd. enum. 535.

Obs. Huc quoque fortasse spectat M. multiradiatum. *Jacq. frag.* 53. 1. at semel solum et insufficienter vidi.

M. (crowded-leaved) foliis triquetris confertis robustis incurvis glaucissimis caule erecto valde ramoso. *confertum.* 152. *

M. confertum. Nob. in Syn. succ. 301.

Obs. Dense ramosum. *Folia* breviora at crassiora glauciora longeque confertiora quam in priore, ramis numerosioribus. *Flores* speciosi pallide rubicundi numerosi.

Prioris forte varietas.

M. (thick, sickle-leaved) foliis confertissimis crassis acinaciformiter falcatis grandipunctatis glaucis. *Nob. in Syn. succ.* 299. *falciforme.* 153. *

40. Glomerata, foliis angustissime acinaciformibus s. compresso-subtriquetris lævibus glaucescentibus; floribus parvulis corymbosè conglomeratis.

glomeratum. 154. M. (upright cluster-flowered) foliis obtuse triquetris compressis glaucescentibus incurvulis, utrinque attenuatis: pedunculis ramulisque filiformibus erectis compressis.

M. glomeratum. Linn. sp. pl. 694.—*Dill. elth. f.* 274.

inflexum. 155. * M. (inflex-leaved) foliis confertis falcato-inflexis e triquetro-semiteretibus compressiusculis subglaucescentibus lævibus, ramis numerosis effuso-confertis. *Nob. in Suppl. pl. succ.* 98.

Obs. The above character (and a further one in the place cited) was made from young plants in a stove at Kew about the month of March 1819, and I have not seen them since, but possess a small well-dried specimen, and believe it to be nearly allied to *M. glomeratum* and *M. confertum*.

41. Asperifolia (*Salm.* Scabrida *Nob.*), foliis plus minus punctato-scabris absolute triquetris subcompressis, sæpe paulumper incurvantibus.

† Staminibus collectis, exterioribus deantheratis fere petaliformibus.

scabrum. 156. M. (the rough) foliis subtriquetris viridibus nitide verrucoso-scaberrimis, foliolis calycinis ovato-acuminatis; petalis apice crenatis.

M. scabrum. *Linn. sp. pl.* 692. — *Dill. elth. f.* 251.
α *pallidum*; floribus pallidioribus s. pallide roseis.
β *purpureum*; floribus saturatè purpureo-rubicundis pulchris.

M. (changeable rough) foliis subtriquetris glaucescentibus verrucoso-præscabris: foliolis calycinis ovato-acuminatis: petalis apice subbidentatis variabilibus. *Nob. in Syn. succ.* 268. *versicolor.* 157. *

M. (reflex-flowered) foliis subtriquetris præglaucis scabris, laciniis calycinis petalisque rubicundis distantiusculis retroflexis: staminibus collectis, cortice dealbato. *Nob. in Syn. succ.* 269. *retroflexum.* 158. *

M. (imbricate-leaved) pedale: erectum: lignosum: foliis linearibus obsolete triquetris glabriusculis glauco-albis, in summis ramorum senectorum imbricatim confertis. *Nob. in Suppl. pl. succ.* 94. *imbricans.* 159. *

Obs. This description was made from a plant in Chelsea Garden in the winter of 1818, which afterwards perished; and until recently, the author has not been able to find another of the same kind, or to distinguish it from its nearest affinities. At length, however, he has found in Chelsea Garden, what is, in all probability, the very same in a young state, and its nearest affinity in flower and habit appears to be *M. retroflexum.*

M. (smooth deflexing) foliis subtriquetris glaucis scabriculis deorsum attenuatis, caulibus subconfertis deflexis, petalis numerosis valde imbricantibus. *deflexum.* 160.

α petalis rubicundè pallescentibus basi purpureis, *M. deflexum. Ait. kew. ed.* 1. *v.* 2.
β petalis saturatioribus concoloribus.
Obs. Corolla parum minor quam in M. retroflexo, petalis longe numerosioribus minus ad solem ardentem reflexis, et aliquantillum latioribus.

leptaleon. 161. * M. (slender, deflexing) foliis subtriquetris glaucis sursum subattenuatis lævibus, carina scabricula: ramis distantiusculis filiformibus.
M. deflexum. Salm. tent. bot. p. 27. *nec Nob.* Bracteæ 2 foliiformes. *Calyx* 5-phyllus foliolis acuminulatis quasi inerme spinulosis, 2 interiobus membranâ exustâ munitis. *Corolla* fere ut in M. glomerato, rubicunda subpallescens. *Stamina* collecta erecta, exteriora paucula petalina rosea, at deantherata ut in affinibus, et parum patentia.
Obs. Rami pauciores graciliores quam in M. deflexo: foliis medio non crassioribus.

†† Staminibus expansis, omnibus antheriferis. Tres sequentes fortè non ejusdem generis cum prioribus 6, ob staminum structuram.

polyanthon. 162. * M. (copious-flowered) foliis parvis glaucis triquetris scabris, ramis dumosis expansis confertis, cortice juniore rufo; floribus numerosissimis paniculatis valde imbricantibus. *Nob. in Syn. succ.* 270.

flexile. 163. * M. (little flexile) foliis parvis internodiis sæpe longioribus, per paria corniculatim inflexis glaucis subtriquetris obtusis lævibus inferne attenuatis; angulis, apice, calycibusque obtusatis: caulibus

erectis, ramis effusis subnumerosis flexuosis patulis.

Communicavit amicus Eques Parmentier nomine M. laxi.

Flores fere ut in M. polyantho, at uti rami et folia longe distantiores.

Nihilominus fortè mera varietas junior. Vix.

M. (dense crowding-leaved) foliis (in senectis) glomeratissimis robustulis subincurvo-recurvulis, clavatim compresso-obtuse-3-quetris, punctato-scabriculis glaucis: ramis dumosis decumbenti-assurgentibus. *polyphyllum.* 164. *

Vigebat in regio horto Kewense 1819, e Capite Bonæ Spei. G. H. ♄.

Obs. Facies fere M. deflexi, vel penultimi, at penultimo 4-plo robustius. Flores cymosè paniculati ut in priore at certe duplo majores, et majus simulantes illos M. emarginati. Bona species. In plantis juvenilibus folia vix conferta.

Floret Jun.—Oct.

M. (deep violaceous) foliis compresso-obtusè-triquetris, punctato-asperiusculis glaucis: foliolis calycinis subæqualibus aculeiformibus patulis. *violaceum.* 165.

M. violaceum. Pl. grass.?

Communicavit amicus Parmentier Eques, A. D. 1120: et olim Princeps de Salm Dyck, at moriens ob iter.

Flores (Octob.) expansi [non vidi], antemeridiani alte violacei, fere ut in M. polyphyllo, extus pallidiores. Petala valde inæqualia, intima pedetentim minora, tenuissima, exteriora emarginata. *Stamina* pauca brevia alba *antheris* luteis, innuptis calycis altitudine. *Styli* 5 subulati erecti

virescentes, lente intus ad basin ramentacei, extus læves.

emarginatum. 166. M. (notch-petalled) foliis subglaucis subtriquetris scabris, calycibus subspinosis; petalis apice altè emarginatis.

M. emarginatum. Linn. sp. pl. 692.—*Dill. elth.* 250.

β. humilius, glaucius, foliis asperioribus.

Vidi semel in regio horto Kewense, e C.B.S., 1821.

Flores fere ut in α, at forte majores.

Vix idem cum M. violaceo, quod non satis vidi.

42. Dilatata.

dilatatum. 167. * M. (gibbous-keeled) foliis distinctis remotis subrecurvis triquetris valde compressis punctatis glaucis: angulo carinali post medium sæpe gibboso. *Nob. in Syn. succ. &c.* 303.

Obs. Nullo vere affine, caule lignoso tripedali fruticoso erecto. *Flores* terminales subternati parvi albi, petalis uniserialibus.

43. Virgata.

virgatum. 168. * M. (slender twigged) foliis distinctis distantibus triquetro-compressis acutis subglaucis punctatis; ramis virgatis elongatis; caule tripedali fruticoso suberecto.

M. virgatum. Nob. in Syn. succ. &c. 290.

Obs. *Flores* pauci terminales parvi. *Ramuli* erecto-effusi tenues singulariter valde compressi ut in sectione sequente. Nullo vere affine, ramis senectis decumbentibus.

44. Bracteata, Salm. (*Adunca inclaudentia* Nobis). Fruticuli erecti ramosi ramulis præcompressis. *Folia* distincta acutè triquetra plus minus asperiter punctulata. *Flores* altè lateque bracteati, semper expansi, e fibrillis brevibus densis ramentaceis duris centralibus lutescentibus petaloidibus. Calyx 5-phyllus. Proprium Genus.

M. (white ringed double bract) foliis viridibus, bracteis quatuor late ovatis carinatis, calycem amplectentibus, petalis basi albis, ramulis fusco-rubris. *bracteatum.* 169.

M. bracteatum. Nob. in Syn. succ. &c. 289.

M. (early flowering broad bract) ramis decumbentibus ancipitibus brunneo-canescentibus; foliis acinaciformi-triquetris, lateribus infernè submembranaceis; punctis pellucidis magnis elevatis. *anceps.* 170. *

M. anceps. Nob. in Syn. succ. 289.

Obs. Bracteæ rarius duplicatæ, valdè dilatatæ.

α. *Flores* longè saturatiores quam in M. stellato, saturatè rubicundi.

β *pallidum* (pale-flowered); ramis numerosis croceo-rufis: foliis acinaci-formitriquetris s. arcuato-incurvantibus pellucenter punctato-scabriusculis, minus viridibus: petalis toto pallidè rubicundis.

Florebat in regio horto Kewense Sept.—Nov. 1819.

gracile. 171. * M. (slender, early, bracteate) foliis glaucescentibus gracilibus scabriculis, bracteis ovato-acutis calycem fere amplectentibus, ramis gracillimis strictis.

M. stellatum. Nob. in Syn. succ. 290. *et Hortorum.*

α. floribus saturate rubicundis.

β gracilius (pale flat-bracted narrow-cupped) omnium affinium floribus pallidioribus, roseisve: foliolis calycinis bracteisque præcompressis angustioribus.

Propria species ob tenuiores calyces bracteasque magis compressas?

Obs. As the *M. stellatum* of other authors (well figured by Decandolle in *Plant. grass.* 29.) does not belong even to the present section of the Genus; I have relinquished that name (a garden one merely when I adopted it) for the present species, and applied to it that of *gracile*, which is peculiarly applicable.

radiatum. 172. * M. (large-flowered, bracteate) foliis glaucescentibus; bracteis late ovatis, pedunculis superne amplectentibus; ramulis subconfertis, cortice canescente. *Nob. in Syn. succ.* 289.—*Dill. elth. f.* 249.

Obs. *Corolla* major quam in affinibus toto saturate rubicunda. *Rami* confertiores.

compressum. 173. * M. (rough, deep-flowered, bracteate) foliis glaucescentibus æquilateri-triquetris scaberrimis, bracteis ovato-acutis pedunculos superne amplectentibus. *Nob. in Syn. succ.* 289, &c.

Obs. Ramuli maxime compressi, floribus mediocribus saturatissime rubicundis.

M. (rough, paler-flowered) foliis 6-12-linearibus semierectis glaucescentibus punctulis pellucidis asperiusculis. *Nob. in Syn. succ.* 334. *patulum.* 174. *

Obs. M. compresso proximum, at minus rigidum asperum, s. erectum, foliis brevioribus latioribus crassioribus glaucioribus magisque expansis, floribus majoribus pallidioribus. (Octob. et Novemb. 1814.)

M. (large rough-leaved bracteate) foliis compresso-triquetris longiusculis subcærulescenti-viridibus pellucide punctatis scaberrimis, apice aduncis, carina subinde unidentata. *asperum.* 175. *

Habitat C. B. S. G. H. ♄.

Cultivated in the Earl of Tankerville's fine Collection in 1818.

α majus; foliis latioribus.

Obs. The leaves in young plants are longer than usual in this family, and with a very slight cærulescent tint, or blue-green. The flowers are unknown.

β cærulescens; foliis angustioribus lævioribus cærulescenti-viridibus.

E regio horto Kewense, a C. B. S., 1820.

Flores non vidi.

45. Eximia, ramis brevioribus adscendentibus contiguis; foliis longis acute triquetris integris valde confertis: floribus magnis speciosis lætissime rubicundis. *Quasi* tres formosi fratres.

M. (the white-eyed red) humile: foliis viridibus ad solem micantibus, ramulisque confertissimis; caulibus floriferis decumbentibus. *formosum.* 176. *

Obs. Habitus fere sequentis, at omnino humilius. *Folia* 1-3-uncialia viridia 2-3 lineas lata abrupte acuta. *Flores* sæpius subternati 2-unciales, in ramulis lateralibus vel terminalibus foliosis, potiusve bracteosis decumbentibus, 5-10-uncialibus cum foliis oppositis subdistinctis; superioribus internodios vix æquantibus. *Petala* numerosa pluriserialia speciosa lata et lætissime rubicunda, apicibus obtusis subdenticulatis. *Calyx* 5-phyllus, laciniis subæqualibus 2 planis, 3 exuste membranaceis. *Filamenta* petaliformia (sive fibrillæ) paucissima; *vera* patentia alba. *Styli* 5-6, filamentis breviores, nuptati expansi sublanceolati horizontales, ad lentem ramentacei, sordidè virescentes. Cætera non examinavi.

Florebat in regio horto Kewense in Aug.—Sept. 1820, a seminibus Capensibus ortum.

spectabile. 177. * M. (glaucous showy) subhumile: foliis glaucis triquetris ramisque valde confertis: caulibus floriferis adscendentibus erectisve; stylis obovatis staminibus albidis duplo brevioribus. — *Nob. in Syn. succ.* 240.—*Bot. mag.* 396.

Obs. Folia ad solem micant, si glaucus color cum digito deletus sit.

conspicuum. 178. * M. (dark red, showy) foliis viridibus ad solem micantibus, ramisque confertis: caulibus floriferis erectis. *Nob. in Syn. succ.* 240.

Obs. Penultimo valde affine at pedale, 4-plo majus, foliis duplo longioribus ramis minus confertis. *Styli* lanceolati sublongitudine staminum roseorum.

46. Blanda, caule erecto suffruticoso, foliis subconfertis longis triquetri-

viridibus; petalis speciosis pluriserialibus magnis dilutissime roseis albisve. Duæ blanditæ species.

M. (the great blush-flowered) foliis confertis com- *blan-*
presso-triquetris perviridibus, ramulis mediocri- *dum.*
bus confertis compressis, pedunculis equalibus 179.
bracteâ longioribus, corolla ad solem expansa *
plana. *Nob. in Suppl. pl.* 95.—*Bot. reg.* 582.

Obs. Flores Jun.—Decemb. terminales magni laxè subcymosi antemeridiani, primo albi, mox pallide rosei sive dilutissimè rubicundi. *Calycis* laciniæ inæquales, acuminatæ. *Germen* mediocre. *Styli* 5 breves ramentacei. Ramuli castaneo rufi, fere graciles.

M. (the fair incurving white) foliis compresso-tri- *curviflo-*
quetris glaucescentibus, ramulis robustis tereti- *rum.*
bus, pedunculis clavatis longitudine bractearum, 180.
germinibus obtusis grossis, corolla incurva. *

Habitat C. B. S.

Introd. a Dom. Gulielm. Ross, apud Stoke Newington, A. D. 1818, qui mihi communicavit.

Obs. Prioris venustam varietatem primo credidi, at differt in statura 2-plo majore; ramulis paucioribus triplo majoribus longè minus compressis, cortice rufo badiovè, demum cinereo; foliis duplo crassioribus et subinde supernè magis dilatatis magis patulis glaucescentibus nec viridibus. *Corolla* speciosior, minus aperta, e petalis longioribus elegantissimè magis incurvantibus albis; morientibus solum tincturâ dilutissime roseâ. In cæteris priore convenit.

†† Floribus luteis, s. aurantiis.

47. AUREA: Suffrutices erecti, foliis distinctis punctatis, obtuse acuteve triquetris: floribus terminalibus subsolitariis magnis aureis aurantiisve, petalis pluriserialibus. Tres sumptuosæ species.

aureum. 181. M. (great orange) foliis cylindrico-triquetris, petalis croceis, stylis atropurpureis.

M. aureum. Linn. syst. nat. ed. 10. *p.* 1600.—*Bot. mag.* 262.

aurantium. 182. * M. (glaucous orange) foliis præglaucis triquetris subcompressis, bracteis semiteretibus; calycinis foliolis oblongo-ovatis; petalis saturate aurantiis imbricatis: stylis externe purpureis. *Nob. in Syn. succ.* 265.

Var. β in *Misc. nat.* 84, est mera planta valde florens.

glaucum. 183. M. (great gold-flowered) foliis acute triquetris præcompressis glaucis scabriusculis; calycinis foliolis ovato-cordatis: petalis sulphureis, pistillis luteis.

M. glaucum. Linn. sp. pl. 696.—*Dill. elth. f.* 248.—*Pl. gr.* 146.

β. foliis brevioribus latioribus, undique magis scabris. *Nob. in Misc. nat.* 84.

48. CYMBIFORMIA, Suffrutices erecti, ramis sæpe concinnè decussatis, foliis parvis obtuse triquetris plus

minus cymbiformibus: floribus luteis roseisve.

M. (upright tetragonous) foliis trigono-cylindricis, caule erecto tetragono fruticoso (corollis luteis). *Thunb. prod.* 91. *tetragonum.* 184.

M. (tall, upright, boat-leaved) foliis triquetris obtusis expansis glaucescentibus grandipunctatis, caule ramosissimo lignoso rigidissimo stricto. *Nob. in Syn. succ.* 262. *strictum.* 185. *

Obs. Frutex 3-pedalis.

Flores non vidi.

An priore (quod non vidi) satis distinctum? An idem?

M. (small, boat-leaved) foliis triquetris patentibus cymbiformibus glaucis, caulibus ramosis, ramulis filiformibus suberectis confertis. *Nob. in Syn. succ. &c.* 263. *cymbiforme.* 186. *

An Mesem. (sessile) foliis trigono-globosis glabris caule erecto tereti ramoso, floribus sessilibus (rubris). *Thunb. prod.* 89?

Obs. Senectæ plantæ dodrantales.

Flores non vidi.

M. (grain-leaved) foliis distinctis subtriquetris ovatis graniformibus trilinearibus, floribus luteis, vespertinis, staminibus collectis: caulibus expansis triuncialibus. *graniforme.* 187. *

Ficoides capensis &c. Brad. succ. t. 20.—*Nob. in Syn. succ.* 263.

M. (soft) foliis patentibus turgidè triquetris canescentibus farctis, margine obtuso lineato-punctato, ramis confertis ancipitibus decumbenti- *molle.* 188.

bus. *Nob. in Syn. succ.* 261.—*M. (molle) foliis triquetris erectis &c. Ait. kew. ed.* 1. *v.* 2. *p.* 192?

Obs. Flores solitarii rubicundi parvi terminales.

Thunbergii. 189. M. (Thunberg's decumbent smooth.)
M. (læve) foliis trigonis lævibus caule decumbente articulato (floribus luteis). *Thunb. prod.* 90.
Nec M. læve (upright white-wooded) floribus rubicundis. *Ait. kew. ed.* 1. *v.* 2. *p.* 187.
Non vidi.

TERETIUSCULA: 7. Suffrutices foliis distinctis punctatis teretiusculis sine papulis; floribus antemeredianis rubicundis, aurantiis, luteisve.

49. Tenuifolia (*Salm.*), foliis cylindraceo-triquetris, floribus luteis coccineisve.

coccineum. 190. * M. (scarlet flowered) foliis tereti-triquetris subcompressis obtusis glaucescentibus, pedunculis basi lævibus, calycinis foliolis obtusulis subæqualibus: petalis coccineis. *Nob. in Syn. succ. p.* 265.

A M. bicoloro dignoscitur foliis semper brevioribus.

α *obtusum*; calycibus foliolis valde obtusatis, ramis forte minus erectis, floribus coccineis. *Pl. grass.* 83.

β *acutius*; calycibus foliolis acutis, ramis erectis petalis extus purpurascentibus.

γ *minus*; humilius: calycinis foliolis acutis. *Corolla* in omnibus varietatibus rectim antemeridiana.

M. (two-coloured) foliis subtriquetris acutis viri- *bicolo-*
dibus, pedunculis calycibusque inæqualibus sca- *rum.*
bris, petalis intus luteis. 191.
M. bicolorum. Linn. sp. pl. 695.
α *erectum ;* elatius : asperius ; ramis erectis. *Dill. elth. f.* 258.
β *patulum ;* humilius : lævius : ramis minus erectis patulisve.
γ *minus ;* duplo plusve minus : lævius : ramis magis erectiusculis.
M. bicolorum minus. Nob. in Obs. Mesem. 246.
Communicavit amicus Dom. Carolus Law.
Forte hæc var. cum var. β. sequentis varietates sunt.

M. (unequal-cupped) foliis subtriquetris perviridi-
bus, pedunculis fructiferis compresso-clavatis : *in-*
laciniis calyciniis valde inæqualibus, membrana *æquale.*
longioribus : ramis effusè decumbentibus. *Nob.* 192.
in Syn. succ. 266.—*Brad. succ. tab.* 7. *
Obs. Fere media inter priorem et sequentem. Forte M. bicoloris varietas, at minus ramosa.
Folia e frigore rufo maculata.

M. (slender-leaved) foliis semiteretibus subcom- *tenuifo-*
pressis subulatis viridibus glabris internodiis *lium.*
longioribus : petalis coccineis, caulibus erectis, 193.
vel procumbentibus.
α *procumbens* (trailing, slender-leaved) ; ramis prolixis effuso-procumbentibus flexuosis, ad nodos radicantibus.
M. tenuifolium. Linn. sp. pl. 592.—*Dill. elth. f.* 256.
β *erectum* (upright, slender-leaved) ; ramis (nisi senectis) erectis, foliis longioribus distantioribus s. minus confertis, et majoribus quam in α, floribus coccineis.

Forte propria species.

Ambas varietates communicavit Regius Professor Williams, ex horto (in hoc genere) celeberrimo Oxoniensi, A. D. 1819.

M. tenuifolium. Pl. grass. 82 ?

variabile. 194. * M. (changeable flowered) foliis subtriquetris compressis glaucis scabris, calycinis laciniis subæqualibus, petalis luteis mox subroseis; caulibus effusis subdecumbentibus. *Nob. in Syn. succ. p.* 266.

α *densius;* asperius: ramis et foliis magis contiguis.

β *lævius;* ramis et foliis lævioribus magis distantibus.

50. Adunca. Suffrutices vix semipedales; foliis subulatis teretiusculis sæpe incurvo-recurvulis, apicibus semper aduncis acutis, floribus rubicundis antemeridianis.

spiniforme. 195. * M. (thorn-shaped) ramulis foliisque cylindraceis subulatis spiniformibus erectis, apicibus subrecurvis, pedunculis carinisque bractearum scabriusculis. *Nob. in Syn. succ.* 291.

β *subaduncum. Nob. in Suppl. pl. succ.* 96.

curvifolium. 196. * M. (great curve-leaved) foliis subdistantibus, basi expansis, tunc incurvo-recurvis compresso-semiteretibus subulatis, ramulis firmis suberectis asperiusculis angulato-compressis. *Nob. in Syn. succ.* 290.—*M. ceratophyllum. Willd. enum. Suppl.* 36 ?

β *minus.*

In hort. Chels.

M. (lesser curve-leaved) foliis triquetro-subulatis infernè incurvis, supernè recurvo-subflexuosis, apice subaduncis: ramulis subfiliformibus compressis flexuosis decumbentibus confertis. *Nob. in Suppl. pl.* 98. *flexifolium.* 197. *

Obs. Priore magis humi depressum, triplo minus.

α *perviride* (dark-green); foliis saturate viridibus, floribus parvis rubicundis.

E regio horto Kewense.

β *læte-virens* (apple-green); minus: foliis pallide viridibus.

Communicavit Dom. Gulielm. Ross, apud Stoke Newington.

Flores non vidi.

M. (small curve-leaved) foliis confertis semicylindricis acuminatis apice valde recurvis, ramulis erectis confertissimis. *Nob. in Syn. succ.* 291. *aduncum.* 198. *

Ultimo duplo minus, non humum versus depressum, sed omnino erectum densum.

M. (thready-stemmed) cespitosum: foliis confertissimis semicylindraceis acuminatis caulibus filiformibus debilissimis reptantibus. *Nob. in Syn. succ.* 291. *filicaule.* 199. *

51. Spinosa.

M. (thorny) foliis tereti-triquetris punctatis distinctis, spinis ramosis. *Linn. sp. pl.* 693.—*M. fruticescens ramis triacanthis. Dill. elth. f.* 265. *spinosum.* 200.

Nullo affine, nisi forte M. dilatato, s. M. virgato.

52. CORALLINA, Suffrutices læves erecti lignosi, ramis concinnè decussatis numerosis cortice plus minus castaneo, foliis subcylindraceis valde glaucis: floribus terminalibus paucis magnis rubicundis.

stipulaceum. 201. M. (stipuled, tall) foliis longis tereti-triquetris subulatis incurvantibus glaucis, basi marginatis.
M. stipulaceum. Linn. sp. pl. 693.—*Dill. elth. f.* 267. 268.

corallinum. 202. M. (lesser coral-stemmed) foliis teretiusculis incurvantibus lævibus medio subcrassioribus glaucis: caule stricto ramosissimo, cortice pullo spadiceove.
M. corallinum; foliis teretibus glabris, caule stricto ramosissimo. *Th. prod.* 89.
Vigebat in regio horto Kewense A. D. 1819, e seminibus Capensibus ortum.

Haworthii. 203. * M. (great rosy-flowered) foliis subulatis tereti-triquetris acutis subincurvatis valde glaucis; cortice rufo castaneove.
M. Haworthii. Donn. hort. cant. ed. 2—6. *p.* 66. —*Nob. in Syn. succ.* 302.

læve. 204. M. (blunt white-leaved) foliis confertis cylindraceis obtusis arcuatis glaucissimis lævibus.
M. læve (upright white-wooded); foliis cylindraceis obtusis amplexicaulibus lævibus, calycibus quinquefidis: laciniis oblongis obtusis. *Ait. kew. ed.* 1. *v.* 2. *p.* 187?—*Nob. in Syn. succ. &c.* 302.
OBS. *Flores* non vidi.

53. SEBACEA, Suffrutices suberecti foliis confertis cylindraceis obtusis farinoso-glaucis subcæruleis mollibus impunctatis, sine papulis; corollis flavis croceisve; capsulis parvis.

M. (long spit-leaved) foliis basi connatis confertissimis præglaucis triquetro-cylindricis arcuatis obtusis submucronatis sebaceis: floribus pomeridianis. *verruculatum.* 205.

M. veruculatum. Linn. sp. pl. 696.

α *Dillenii. Dill. elth. f.* 259.

β *Candollii* (cluster spit-leaved). *Pl. grass.* M. verruculatum ramulis foliisque confertioribus brevioribus, sive conglomeratis ramos toto tegentibus.

Ex horto Oxoniense nuperrime communicavit Regius Professor Williams.

At olim habui ex oppido Leeds, in com. Ebor. nomine "the tallow-leaved Fig-marygold."

OBS. *Folia* valde sebacea, breviora at crassiora longeque confertiora quam in α, apicibus (aëre aperto) eleganter purpureo finientibus.

M. (purple-saffron-flowered) foliis confertis tereti-triquetro-semicylindris farinoso-glaucis obtusis internodio brevioribus sebaceis, foliolis calycinis productim præinæqualibus; corollis innuptis croceis extus purpureis. *Nob. in Syn. succ. p.* 259. *purpuro-croceum.* 206. *

M. insititium. Willd. enum. 536. 54.

OBS. Frigoris magis impatiens cæter.

β *flavo-croceum* (yellow-saffron-flowered) foliis subconfertis distantibusve internodio brevioribus tereti-semicylindricis valde obtusis farinoso-glaucis, glaucescentibusve: corollis utrinque

flavis, nuptatis s. morientibus croceis: caulibus magis flexis.

HABITAT C. B. S., ubi invenit amicus Dom. Burchell; et communicavit A.D. 1816.

FLORET Maio—Septemb.

OBS. Forte propria species: omnino elatius et magis flexum quam *α*, et lignosius, calycibus (præcipue fructiferis) longè productim majoribus carnosis s. pulposis, floribus paulo minoribus: foliis remotioribus firmioribus, frigoris minus impatientibus. *Stamina antheræque* nuptatæ breves luteæ. *Styli* sub-7, (nuptati) brevissimi acuti expansi, ad lentem ramentacei.

γ minus; var. *α.* simillimum; at foliis brevioribus, corollis extus minus purpureis.

croceum. 207. M. (saffron-flowered) foliis confertis triquetris semiteretibus farinoso-glaucis subsebaceis obtusiusculis internodiis brevioribus, foliolis calycinis subinæqualibus, petalis obtusis croceis.

M. croceum. Jacq. Frag. t. 11. *f.* 2.—*Nob. in Suppl. pl. succ.* 97, observatione exclusâ, quæ ad varietatem *β* prioris pertinet.

OBS. Priore vix satis distinctum ramis confertioribus, foliolis calycinis magis æqualibus, corolla minore, semper utrinque saturate crocea. *Stamina* et *antheræ* exiguæ breves luteæ. Frigoris minus impatiens priore.

PAPULOSA: S. Foliis ramulisve fere semper plus minus papulosis, radice subinde bienni annuave.

54. PLATYPHYLLA, radice annua vel bienni, rarissime fruticulosa; foliis

caulibusque ad solem nitidissimè papulosis.

† Foliis plus minus undulatis.

M. (the diamond Fig-marygold) foliis amplissimis ovato-acutis undulatis, alatim decurrenter petiolatis crystallino-papulosis, subtus papuloso-crystallinis triplinerviis, nervo principi superne triplicato, radice bienni. *crystallinum.* 208.
M. crystallinum; foliis alternis ovatis papulosis undulatis. *Linn. sp. pl.* 688.—*Dill. elth. f.* 221.—*Nob. in Suppl. pl.* 92.
Obs. Sequenti simillimum et triplo majus, erectius, minus glaciatum. At flores non vidi, neque bene examinavi.
Habitat C. B. S. St. ♂.

M. (the ice-plant) foliis amplis alternis ovatis præ-undulatis, uti caulibus calycibusque, papuloso-glaciatissimis; radice annua.—*Nob. in Supp. succ.* 92. *glaciale.* 209. *
Habitat in Græcia prope Athenas.

M. (laurel-leaved) foliis oppositis cuneato-obovatis, caule valde flexuoso, petalis antherisque rubicundis, radice fusiformi. *Nob. in Misc. nat.* 49.—*Pet. gaz. t.* 84. *f.* 4. *Laurifolium.* 210. *
An hujus generis? Vix Othonnæ species.

M. (curled) foliis alternis ovatis petiolatis undulatis, petalis minutis rubicundis, radice annua. *Nob. in Misc. nat.* 44.—*Pet. gaz. t.* 88. *f.* 5. *crispum.* 211. *

M. (jagged-leaved) foliis oblongis pinnatifidis papulosis, petalis minutis luteis. *pinnatifidum.* 212.

M. pinnatifidum. Linn. syst. veg. 470. *Suppl.* 260.—*Bot. magaz.* 67.

†† Foliis planioribus vix undulatis, basi cuneatis.

sessiliflorum. 213. M. (small ice-plant) foliis planis spathulatis, caulibusque papulosis; ramis divaricatis; floribus sessilibus (luteis). *Ait. kew. ed.* 1. *v.* 2. *p.* 193.

α luteum; ut supra.

β album; flore albo: foliis ovatis petiolatis papuloso-nitentibus, præcipue subtus; summis lanceolatis subalternis: floribus paniculatis parvis sessilibus, radice subbienni. *Nob. in Suppl. succ.* 93.

humifusum. 214. M. (narrow-leaved ice-plant) foliis amplexicaulibus spathulatis carinatis: papulis conicis scabris, petalis minutissimis. *Ait. kew. ed.* 1. *v.* 2. *p.* 179.

flaccidum. 215. M. *Jacq. Salm. tent. nov. p.* 16, prope M. humifusum.

Non vidi.

papulosum. 216. M. (papulose) foliis oppositis spatulato-oblongis papulosis, floribus pedunculatis filiformibus deflexis.

M. papulosum. Linn. suppl. pl. 259, (*excluso synon. Jacq.*) ⊙.

Aitoni. 217. M. (Aiton's) foliis oppositis alternisque ovato-spatulatis subundulatis papulosis, ramis calycibusque angulosis: floribus pomeridianis rubicundis.

M. Aitoni. Jacq. vind. 3. *t.* 7.

M. angulosum. Thunb. prod. 91?

M. (spear-leaved) foliis alternis lanceolatis obtusiusculis papulosis, calycibus pedunculatis crystallinis. *Nob. in Misc. nat.* 45. *lanceolatum.* 218. *

α. *album* ; floribus parvis albis.

β *roseum* ; majus : foliis lanceolato-spatulatis, pedunculis 6-12 linearibus teretibus papuloso-nitentibus : calycinis foliolis 3 foliiformibus expansis ; 2 minoribus membranaceis : corolla rubicunda.

Obs. Varietas e seminibus α orta, in horto meo Eboracensi A.D. 1813, quasi media inter M. lanceolatum et M. Aitoni.

Forte hybrida proles, nempe ambæ plantæ copiosè florebant A.D. 1812 in horto in eodem loco, intermixtæ : nunc eheu ! ambæ deletæ : sed optime exsiccatas possideo.

M. (Volckamer's small ice-plant). Ficoides africana procumbens latifolia annua : floribus argenteis minoribus. *Volck. norimb.* 166, cum icone.—*Nob. in Obs. mesemb. p.* 426. *Volckameri.* 219. *

Obs. Priore majus, at valde affine.

Non vidi.

M. (thready, spear-leaved) foliis lanceolatis papulosis, floribus axillaribus sessilibus, caule filiformi decumbente. *Thunb. prod.* 89. *filiforme.* 220.

An satis a penultimo distinctum ? An idem cum M. sessilifloro, supra ?

††† Foliis integris cordatis.

M. (heart-leaved) foliis petiolatis cordato-ovatis, caulibus fruticosis procumbentibus effusis : calyce quadrifido bicorni. *cordifolium.* 221.

M. cordifolium. Linn. suppl. pl. 260.—*Smith spicileg. bot. t.* 6.

Species singularis, forteque sui generis.

55. Pomeridiana (afternoon flowering), radice annua, foliis oppositis sæpius spatulato-lanceolatis, et ad lentem parum papulosis; floribus pomeridianis luteis, speciosis: filamentis subconvergentibus, exterioribus deantheratis petaloidibus: germine hemisphærico.

pomeridianum. 222. M. (great-cupped) folis late lanceolatis planiusculis lævibus ciliatis distinctis: caule, pedunculo, germinibusque hirtis.

M. pomeridianum. Linn. sp. pl. 698.

α *Curtisii*; ut supra (*Bot. magaz.* 540) petalis calyce vasto brevioribus.

Obs. Foliola calycis valde inæqualia, 2, minora, basi membranacea: 3, 2-4-plo majora, lanceolatè dilatata, variè obtusata, et omnino foliacea: at laterales flores (ut in affinibus) semper habent cum minoribus petalis calyces sæpius longè minores.

β *Andrewsii* (naked, plantain-leaved); minus; glabrum; nudum: foliis ovato-oblongis summis subciliatis; petalis calyce mediocre longioribus.

M. glabrum. Bot. rep. 57, non Aitoni aliorumque.

Fortasse species propria.

Folia superiora calycesque solum ciliata, foliolis calycinis ovato-lanceolatis linguæformibusve.

Candollii. 223. * M. (naked narrow-cupped) foliis oppositis lanceolatis acutis subciliatis: pedunculis subterminalibus longissimis solitariis hirtis: foliolis calycinis lanceolato-ovatove-acuminatis loratis.

M. Helianthoides. Pl. grass. 135, non *Aitoni, aliorumque.*

M. (woolly lance-cupped) foliis lineari-lanceolatis *pilosum.*
ciliatis; caulibus ramosis effusis; pedunculis, 224.
bracteis, calycibusque flore brevioribus, subla- *
nato-villosis. *Nob. in Misc. nat.* 47.—*Breyn.
cent. t.* 79.—*Moris. s.* 12. *t.*6. *f.* 13.—*M. ca-
lendulaceum. Nob. in Misc. nat.* 471. *&c.* sed
differt a sequente, foliolis calycinis majoribus
ovatis-lanceolatis, s. ovato-linearibus: *Germine*
lanato villoso: *Stylis* circiter 19.

M. (hispid narrow-cupped) foliis lineari-lanceola- *calendu-*
tis vix spathulatis calyceque ciliatis; foliolis ca- *laceum.*
lycinis lorato-linearibus crassis turgidisve, pe- 225.
talos æquantibus: caulibus valde ramosis: pe- *
dunculis scabris, germinibusque parcè hispido-
pubescentibus, brevibus albis pilis.
HABITAT C. B. S. ☉.
FLORET Aug.
E regio horto Kewense A. D. 1819.
OBS. The *M. calendulaceum* of *Misc. nat.* 47,
taken from the old figures of Morison and Brey-
nius, appearing now to merge into our *M. pi-
losum* (erroneously written *hirtum* in *Misc.
nat.* 46. *line* 4), the name of *calendulaceum* is
used for the present plant, which it most closely
resembles.

M. (spatula-leaved) foliis spathulatis planis læ- *Helian-*
vibus; pedunculis longissimis; calycibus basi *thoides.*
planis angulatis. *Ait. kew. ed.* 1. *v.* 2. *p.* 193. 226.
—*Non Pl. grass.* 135, *quod M. Candollii su-
pra est.*
OBS. Læve omnino, sine punctis papulisve, foliis
lanceolatis nudis virescentibus, petiolis basi dila-
tatim semiamplectentibus vel vaginantibus.
Pedunculi 4-unciales et ultra. *Folia* calycina

plana, duo minora basi membranacea fere planatim pyramidalia. *Petala* lucidissimè lutea, extima uncialia, interiora sensim sensimque minora filamentiformia. *Filamenta* brevia tenuissima lutea: polline pallido. *Styli* sub 10 infernè connati; nuptati longi subulati recurvi pallidi, lente puberuli. *Flores* duos pomeridianos solum examinavi.

Obs. Hæc Sectio ob vastum calycem, stylos numerosos, germina depressa multilocularia, tempusque florendi, forte genus proprium.

56. Limpida. Subacaulia, at ramosa: crystallina s. pyropæa: radice annua: foliis subcuneato-linearibus, valde-limpido-papillosis, et parum convexis, supra sæpe læte inflexo-canaliculatis.

limpidum. 227. M. (transparent) foliis oppositis spathulatis obtusis scabridis: papulis oblongis, foliolis calycinis oblongis obtusis medio coarctatis. *Ait. kew. ed.* 1. *v.* 2. *p.* 183.

M. cuneifolium. Jacq. ic. 3. *t.* 288.

Obs. Radix annua fibris ramosis. *Rami* effusi sæpe rufescentes, uti folia, pedunculi, calycesque scabrido-papulosi; papulis ad lucem crystallinis sæpeve formosissimè pyropæis, s. splendentibus uti pyropus. *Folia* lanceolato-spathulata e petiolis fere orientia, basi costâ rubrâ. *Pedunculi* 3-4-unciales deflexo-adscendentes teretes. *Calyx* hemisphæricus nitidus, foliolis 3 majoribus oblongis obtusioribus medio singulariter coarctatis, 2 minoribus coarctatione nulla, apice minus obtusis, at parum ad latera infra apicem membranaceis. *Petala* uncialia ruber-

rime lucida (in autumno pallidiora), extus pallida, medio costatim lineâ saturatiore. *Filamenta* brevia ruberrima. *Antheræ* luteæ. *Styli* 5 parvi erecti quoque ruberrimi, antherarum altitudine.

Communicavit cum sequente amicus Dom. Aiton. A sequente vix differt nisi in foliis latioribus, et floribus pallidioribus magisque politè nitentibus atque majoribus.

M. (the 3-coloured annual) foliis linearibus inflexo-canaliculatis obtusis scabrido-papulosis; pedunculis calycibusque nitidè papillosis, vel pyropæo-crystallinis. *tricolor.* 228.

α *pyropæum* (the ruby); ramis pedunculis calycibusque ad lucem pulcherrime pyropæis: petalis ruberrime lucidis.

M. pyropæum α. Nob. in Suppl. succ. p. 99.—*M. tricolor. Bot. mag.* 2144, at cum flore pallidiore picto, *et Willd. enum.* 530.

β *roseum* (the rosy); omnino pallidius, sine pyropæo colore, flore roseo.

M. pyropæum β. Nob. in Suppl. pl. succ. 99.

Obs. This is the pale var. mentioned in *Bot. mag.* 2144, on the authority of Mr. Anderson, who never saw the plant, having only heard of three varieties being known to the author.

γ *album* (the blush-white); longe pallidius, flore roseo-albo.

Apud Kew vidi florentem A. D. 1819.

M. lineare; acaule, foliis linearibus (flore albo). *Thunb. prod.* 88.

Descriptio α in horto nostro A. D. 1820.

Flores numerosi unciales pulcherrimi primo mane ad solem aperientes, altissimè et vivacissimè rubicundi, basin versus albi, at ipso basi pyropæi,

petalis uni -vel bi-serialibus obtusis integris. *Filamenta* brevia, antheræque atropurpureæ ; omnia antherifera, fibrillis petaloideis deantheratis nullis. *Styli* 5 exigui demum ad lentem expansi ramentacei s. plumosi, pyropæi, staminibus humiliores. *Germen* depressum pyropæum, annulo marginali staminifero atropurpureo, et nitidissimo quasi nectarifero.

Cum priore forte Genus proprium, characteribus sequentibus.

Petala uniformia uni- bi-serialia.

Fibrillæ (filamenta petaloidea sæpe subantherifera) nullæ.

Germen annulo subnectarifero lucente staminifero cinctum. Formosæ duæ species ; scintillantes, quasi gemmatæ sorores.

gramineum. 229. * M. (grassy yellow-flowered) foliis radicalibus, gramineis, scapo filiformi, calycinis laciniis 5 lanceolatis corolla lutea longioribus : radice annua. *Nob. in Misc. nat.* 55. *excluso synon. Thunberg.—Pet. gaz.* 88. 7. *Cat.* 487.

An a priore distinctum ?

clavatum. 230. * M. (annual club-leaved) foliis clavatis obtusis, floribus terminalibus aureis : radice annua. *Nob. in Misc. nat.* 56. *Pet. gaz. t.* 88. 7.—*Cat.* 487.

Non vidi.

Forte non a priore distinctum.

sabulosum. 231. M. (stemless) acaule, foliis oblongis planis integris (flore luteo). *Thunb. prod.* 90.

criniflorum. 232. M. (hair-petalled) acaule, foliis obovatis papulosis (corolla alba). *Thunb. prod.* 88.

57. Calyculata, Suffrutices procumbentes, foliis semiteretibus canaliculatis villosulis; calycibus corollinis 5-6-fidis, petalis nullis.—Genus proprium.

M. (villous) foliis pubescentibus connatis impunctatis, caule piloso. *Linn. sp. pl.* 692. *villosum.* 233.
M. villosum; foliis linearibus semiteretibus canaliculatis pubescentibus, caulibus pilosis prostratis. *Nob. in Syn. succ.* 254.
Obs. Suffrutex. Corolla nulla, sed *Calyx* 5-phyllus, interne coloratus corollinus, extus viridis. An Sesuvii species?

M. (six-leaved) calycibus hexaphyllis. *hexaphyllum.*
Mesem. foliis parvis teretibus, flore virenti hexapetalo. *Burm. dec. t.* 26. *f.* 2. 234. *

58. Cylindracea, Radice annua, ramis debilibus, foliis papulosis sæpe teretiusculis, oppositis, alternisque.

M. (small-flowered) foliis filiformi-semiteretibus distinctis: papulis ovatis, floribus lateralibus sessilibus; terminalibus pari foliorum cinctis. *Ait. kew. ed.* 1. *v.* 2. *p.* 179. *caducum.* 235.
Non vidi.

M. (dwarf spreading) foliis amplexicaulibus distinctis linearibus supra planis internodiis longioribus papulosis: papulis oblongis, floribus pedunculatis, calycibus quinquefidis. *Ait. kew. ed.* 1. *v.* 2. *p.* 180. *apetalum.* 236.

copticum. 237. M. (coptic) foliis papulosis semiteretibus distinctis, floribus sessilibus axillaribus, calycibus 5-fidis. *Linn. sp. pl.* 688.—*Willd. sp. pl.* 2. 1037.

Non vidi.

An satis a priore distinctum?

nodiflorum. 238. M. (ægyptian) foliis alternis teretiusculis obtusis basi ciliatis. *Linn. sp. pl.* 687.—*Pl. grass.* 88.—*Kali Crassulæ minoris foliis. Moris. hist.* 2. *sec.* 5. *t.* 37. *f.* 7.

Obs. Nomine M. apetali, nuper communicatum ab Illust. Pr. de Salm Dyck. Optimè repræsentatur in *Pl. gr. l. c.*

Toto papulosum. *Caulis* ramosus: rami erecti, teretes demum cum caule decumbentes. *Folia* lineari-semicylindrica canaliculata obtusa viridia, fere semifiliformia, opposita alternave, remota basi ciliis albis. *Flores* in axillis foliorum breviter pedunculati s. subsessiles, basi bracteatim 1-2-foliati. *Calyx* foliolis 4 valde inæqualibus, papuloso-crystallinis foliiformibus, 2 cæteris 2-3-plo majoribus; tertio minorè, quarto minimo; 3 et 4 basi membranatis. *Flores* forte nunquam aperti, *corolla* alba in calyce semper abscondita, *petalis* uniserialibus lorato-lanceolatis integris emarginatisve vix lineam longis. *Filamenta* alba petalis breviora, sed vix longitudine antherarum majuscularum lutearum erectarum. *Germen* minutum pulposum. Styli 4. Cætera non vidi.

ciliatum. 239. M. (ciliated) foliis oppositis connatis semiteretibus, stipulis membranaceis reflexis laceris ciliiformibus. *Ait. kew. ed.* 1. *v.* 2. *p.* 179.

Non vidi, nisi idem cum M. pygmæo Nobis, at vix. Potius præced nti affinius. An stipulæ

(sic dictæ) eædem cum foliis marcescenti-persistentibus?

M. (joint-flowering) foliis semiteretibus papulosis distinctis, floribus sessilibus axillaribus, calycibus 4-fidis. *Linn. sp. pl.* 688. *geniculiflorum.* 240.

Obs. Distinguitur ramis divaricatis, foliisque distantibus. Forte alia, potiusve suæ sectionis.

M. (bundled) foliis teretibus glabris, floribus terminalibus solitariis (albis), caule articulato-radicante. *Thunb. prod.* 89. *fasciculatum.* 241.

An hujus sectionis?

Non vidi.

59. Planifolia, Suffrutices humillimi grossi, vix lignosi, foliis amplexicaulibus sublanceolatis oblongisve, planis inflexo-canaliculatis minute papillosis; costatim, obtuse carinatis: floribus fere semper dichotomis: calycibus magnis 4-5-phyllis; corollis albis vel lutescentibus.

† *Pentagoni.*

M. (Sea-aster-leaved) foliis alternis lanceolatis planis impunctatis, caulibus laxis simplicibus, calycibus pentagonis. *Linn. sp. pl.* 690.—*Dill. elth. f.* 220.—*Pluk. mant.* 329. *f.* 4. *Tripolium.* 242.

Obs. Nullo affine. Non vere papulosum.

†† Calycibus subpyriformibus magnis, sine angulis, foliis oppositis summis subalternis amplexicaulibus, minute papulosis.

expansum. 243. M. (Houseleek-leaved) foliis planiusculis lanceolatis impunctatis patentibus distinctis oppositis alternisque remotis. *Linn. sp. pl.* 697.—*Dill. elth. f.* 223.—*M. tortuosum. Pl. gr.* cum icone.

varians. 244. * M. (varying-leaved) foliis lanceolatis acuminatis carinatis, subinde obtuse carnoso-triquetris canaliculatis: pedunculis crassissimis. *Nob. in Misc. nat. p.* 51.—*Pet. gaz. t.* 78. *f.* 10.

tortuosum. 245. M. (twisting Houseleek-leaved) foliis planiusculis oblongis-ovatis subpapulosis confertis connatis, calycibus triphyllis bicornibus. *Linn. sp. pl.* 697.—*Dill. elth. f.* 222.

concavum. 246. * M. (concave-leaved) foliis ovato-lanceolatis crassis excavatis, floribus terminalibus solitariis lutescentibus.

Mesem. *foliorum apicibus rubris,* flore radiato. *Burm. dec. t.* 26. *f.* 1.

An M. tortuosum supra?

pallens. 247. M. (glaucous oblong) foliis amplexicaulibus distinctis glaucis oblongo-lanceolatis inflexo-concavis obtuse carinatis: foliolis calycinis ovato-oblongis, corollâ longioribus.

M. pallens. Ait. kew. ed. 1. *v.* 2. *p.* 182.—*M. expansum. Pl. gr.* cum icone.

loratum. 248. * M. (glaucous strap-leaved) foliis loratis longis canaliculato-inflexis obtusis glaucissimis subtus convexis, foliolis calycinis oblongo-attenuatis obtusis corollam æquantibus.

Obs. Priori simillimum ut ovum ovo; at distinguitur foliis duplo angustioribus et longioribus;

nec ullo modo lanceolatis. Sequenti magis affine; at cum foliis longioribus non lividis: flore albo nec vivacissime subcarmosino, calyce latiore.

Communicavit Regius Professor Williams, ex Oxonia, A. D. 1819.

Floret cum affinibus.

Forte non propria species.

M. (livid, strap-leaved red flowering) foliis lorato-oblongis obtusis glauco-lividis canaliculatis, subpunctato-papulosis; costatim carinatis, caulibus ramosis teretibus decumbentibus. *relaxatum.* 249.

M. relaxatum. Willd. enum. p. 36.

An prioris varietas?

Obs. *Flores* ut in M. pallente, at intensè et vivacissimè rubicundi fere subcarmosini, antemeridiani, petalis apice eroso-obtusis. *Foliola calycina* subæqualia 2 minora membranacea, fere ut in M. lorato, et angustiora quam in M. pallente. *Stamina* filamentis albis brevibus, *antheris* luteis.

M. (brittle skeleton-leaved) foliis lanceolato-ellipticis papuloso-crystallinis; mortuis, nervis solum persistentibus; petalis staminibusque argenteis: caulibus ramosis procumbentibus. *Nob. in Misc. nat.* 50. *anatomicum.* 250. *

Vix M. ovatum infra.

Obs. Caules graciles teretes erecto-decumbentes.

β *fragile;* foliis supra magis concavis viridioribus s. minus canescente-papulosis: emarcidis magis perfectis et minus sceletoni instar. An M. emarcidum infra?

emarcidum. 251. M. (dry-leafy) foliis ovatis extimis emarcidis, caule erectiusculo ramoso glabro (floribus albis). *Thunb. prod.* 88.
An idem cum priore?

ovatum. 252. M. (great Chickweed-leaved) foliis ovatis planis, floribus terminalibus caule decumbente (floribus albis). *Thunb. prod.* 89.

rectum. 253. M. (upright egg-leaved) foliis connatis ovatis papulosis, ramis erectis fastigiatis (floribus albis).
M. fastigiatum. Thunb. prod. 88. nec *Aliorum.*
E regio horto Kewense, a Capensibus seminibus ortum, A. D. 1819.
Flores non vidi.

lanceum. 254. M. (upright spear-leaved) foliis lanceolatis planis, floribus terminalibus, caule erecto subtetragono (floribus albis). *Thunb. prod.* 89.

articulatum. 255. M. (narrow spear-leaved) foliis lineari-lanceolatis, caule erectiusculo ramoso, floribus secundis (albis). *Thunb. prod.* 88.
An idem cum M. pallente. *Ait. kew.* supra? Vix.

60. Crassulina, Suffrutices humillimi, foliis lanceolato-linearibus farctim teretiusculis (junioribus canaliculatis) subulatis: ad lucem micantibus minutissimis atomis.
Obs. Flores albi carneive.

Crassuloides. 256. * M. (Crassula-like) foliis-lanceolato-linearibus subcanaliculatis, subtus convexis: floribus solitariis terminalibus.

E regio horto Kewense, a Capensibus seminibus ortum, A.D. 1819.

Obs. Non ultimi varietas e modo florendi. Suffrutex pygmæus 3-4-uncialis erecto-decumbens, ramis numerosis confertis erecto-effusis, sæpeque procumbentibus atque ad nodos radicantibus, valde foliosis. *Folia* subconferta crassa viridia minime papulosa. *Flores* (Augusto mense) antemeridiani. *Pedunculi* foliorum longitudine subunciales teretes ebracteati. *Calyx* 5 phyllus, foliolis 3 minoribus basi membranaceis, 2 paulo majoribus acutioribus. *Petala* subuniformia latiuscula 4 lineas longa obtusa emarginata lucidè alba basi rosea, demum pallidissimè rosea. *Fibrillæ* (i. e. petala intima staminiformia at sine antheris) paucæ erecto-recurvæ, demum revolutæ roseæ. *Antheræ* paucæ pallidè lutescentes collectæ, post anthesin erectæ distantiores, albæ. *Styli* 5 inter antheras absconditi; at post fœcundationem antherarum altitudine erecti et conspicui, subulati luteo-virescentes subramentacei. Germen 5-loculare turbiniforme.

M. (persisting-cupped) foliis confertis subpapulosis erecto-subimbricantibus subulato-farctim-semiteretibus: floribus ternato-cymosis: pedunculis clavatis: calycibus foliolis digitiformibus acutis. *Nob. in Suppl. succ.* 96. *incomptum.* 257. *

Obs. Suffrutex semipedalis et ultra dumosè ramosus ramis sæpe erectis vel in senectis decumbentibus. *Folia* pallide viridia minutè papulosa vix uncialia. *Flores* sæpe ternato- vel biternato-cymosi, rariusve solitarii, primò concinni, mox morientes, et demum incompti, e persistentibus (denique morientibus) bracteis magnis totæ cymæ; pedunculis clavatis, calycibusque intumes-

centibus, et quasi digitiferis. *Pedunculi* supra ordinarias bracteas omnino foliiformes, incrassati teretes et superne fere ficiformes post florescentiam. *Calycis* foliola 5, inæqualia, patula: omnia demum plus minus acute digitiformia erecta, præ alios persistentia tumida. *Corolla* nitidè nivea parvula calycis longitudine, diurna, petalis subæqualibus acutiusculis subintegris. *Filamenta* collecta fere in conum, nivea, extima erecto-recurva deantherata et pedetentim quasi petaliformia. *Antheræ* albæ, mox luteæ. *Pollen* luteum. *Styli* 5 erecti ramentacei lutescentes *antheras* æquantes. Vix hujus sectionis. Nullo vere affine. Ob calycem digitiformem, sectionem sequentem approximat.

61. DIGITIFLORA, (ob foliola calycis digitiformia) Suffrutices 1-2-pedales ramosi erecti, foliis subcylindraceis, in junioribus altè sulcatis: innumeris atomis ad solem micantibus: floribus mediocribus nitidè albis stenopetalis antemeridianis ternatis vel solitariis terminalibus.

splendens. 258. M. (shining white-flowered) foliis semiteretibus impunctatis recurvis distinctis congestis, calycibus terminalibus digitiformibus. *Linn. sp. pl.* 689.—*Dill. elth. f.* 260.

β. paulo minus. *Nob. in Misc. nat.* 62.

flexuosum. 259. * M. (flexuose-leaved) foliis confertis flexuoso-recurvis perviridibus semiteretibus, laciniis calycinis digitiformibus: caulibus subflexuosis gracilibus lucidis. *Nob. in Misc. nat. p.* 61.

Obs. Flos fere ut in M. fastigiato *α*, albus, extus (præcipue ante anthesin) tincturâ rubedinis.

M. (acute-cupped) foliis confertis lineari-subulatis semiteretibus pallide viridibus altè canaliculatis, adultis expansis semiteretibus; calycibus foliolis acutis. *sulcatum.* 260. *

Obs. Vidi florentem in horto amici Dom. Burchell, a seminibus Capensibus ab ipso collectis, ortum, Sept. A.D. 1819.

Frutex 3-pedalis erectus. *Folia* congesta, uncialia subacuta.

M. fastigiato simillimum, at duplo majus; foliis non-reflexis: calyce acuto nec obtuso. *Corolla* lucide alba, extus primò substraminea.

A M. longistylo differt in foliis sulcatis &c.—M. splendentis forte varietas, at foliis longioribus sed angustioribus, acutioribus, et in juvenilibus magis sulcatis: calyce longè acutiore, petalis setaceis albidioribus, s. intus sericeo-albis, duplo angustioribus. Præterea fruticulus duplo altior. *Filamenta* vera erecta collecta, extima falsa pedetentim patula vix antherifera petaliformia. *Styli* 5, erecti *stamina* non superantes.

M. (level-topped) foliis confertis flexuoso-reflexis subulatis semiteretibus glaucescentibus; calycinis laciniis æqualibus, tribus utrinque membranaceis; caulibus gracilibus erectis, mox subdecumbentibus. *Nob. in Misc. nat. p.* 60, excluso synon. *Bradleii.* *fastigiatum.* 261. *

Obs. Corolla extus sordide fulva, intus pallidior: mox lutescens et albicans.

β reflexum; foliis flexuoso-reflexis obtusis semiteretibus glaucescentibus, calycinis laciniis

valde inæqualibus; caule erecto, ætate basi incrassato.
M. reflexum. Nob. in Misc. nat. 60.

umbelliflorum. 262. M. (round-germened) foliis distinctis teretiusculis papulosis, caule erecto, ramulis unifloris. *Willd. enum.* 534, *et Jacq.*
HABITAT C. B. S. G. H. ♄.
Flores non vidi.
Forte varietas *M. fastigiati, Nob.*; sed germine rotundiore, calyceque paulo diverso.
Non satis vidi.

longistylum. 263. M. (long-styled) caule suffruticoso ramis elongatis, foliis oppositis distinctis filiformibus, stigmatibus quinis stamina superantibus. *Pl. grass. p.* 147.
HABITAT C. B. S. G. H. ♄.
Non vidi.

pallescens. 264. * M. (pale) foliis oppositis amplexicaulibus distichis oblongo-lanceolatis, acutis obtuse carinatis; papulis minutis.
M. pallens. Jacq. hort. 3. 16. 279.—*nec Ait. kew. ed.* 1. *quare mutavi ad pallescentem.—M. reflexum β, floribus purpurascentibus. Nob. in Misc. nat. p.* 61.
β. flore albo. *Jacq. l. c.—cum iconibus.*

micranthon. 265. * M. (long-cupped small flowered) foliis lanceolato-linearibus carinatis impunctatis distinctis; floribus pedunculatis; calycibus 4-fidis, foliolis duobus longissimis, aliis brevissimis. *Jacq. hort.* 3. 15. 278, *nomine M. parviflori.*

Obs. A M. parvifloro supra Nobis omnino discrepat.

Obs. Since writing the above, I have received a recent but dying sprig for this species from His Highness the Prince de Salm Dyck. It belongs to the next section, and is scarcely, if at all, distinct from M. tenue; but seems to have longer and broader leaves, and does not appear to answer to the above cited figure of Jacquin.

62. Juncea (Articulata *Salm*), Suffrutices dodrantales sub-erecti ramosi graciles virides, ramis articulatis, herbaceo-lignosis: foliis distinctis parvis linearibus subulatis tenuissimis, marcescenti-deciduis: floribus antemeridianis minutis stramineis albis roseisve; calycibus 4-fidis, foliolis duobus cæteris duplo auctim longioribus. Genus proprium?

M. (rushy) foliis subulatis semiteretibus acutis remotis, floribus terminalibus dichotomis, laciniis calycinis inæqualissimis: ramis quandoque junciformibus. *Nob. in Misc. nat. p.* 59. *junceum.* 266. *

Obs. Rami sæpe defoliati, articulatim-junciformes. *Flores* numerosissimi rosei, basi albicantes, minimi.

M. (the slender-rushy) ramis gracillimis subsecundis effusis: foliis erectis linearibus, tenuissimis. *tenue.* 267. *

E regio horto Kewense, a Capensibus seminibus ortum, A.D. 1819.

Obs. Omnium tenuissimum. *Rami* et ramuli

articulatim filiformes; *folia* vix semuncialia linearia utrinque fere attenuata; canaliculata. *Flores* non vidi.

rapaceum. 268. M. *Jacq. frag.* 52. 1.
M. rapaceum. Salm. tent. bot. 24.
Obs. I have no knowledge of this plant, nor recollection of Jacquin's figure. It occurs as above cited, following *M. micranthon* and *M. junceum.*

63. Spinulifera, Suffrutices costis foliorum exsiccatorum basi persistentibus et spinulescentibus: ramulis, foliis canaliculatis viridibus pedunculisque, papuloso-crystallinis; caudice senecto basi sæpe strumoso: Corollis fulvis luteisve, antemeridianis.

spinuliferum. 269. * M. (spinulescent) foliis confertis semiteretibus canaliculatis, caudice ramisque erectis incrassatis. *Nob. in Misc. nat. p.* 57.

grossum. 270. M. (gouty) foliis linearibus teretiusculis obtusis utrinque attenuatis: caudice senecto basi strumoso: ramis effuso-decumbentibus. *Nob. in Misc. nat. p.* 56.

salmoneum. 271. * M. (trailing, salmon-flowered) ramis subfiliformibus debilibus elongatis prostratis, radicibus senectis superne strumosis: foliis linearibus sulcatis internodio longioribus, sordide papulosis.
Communicavit amicus Dom. Burchell A.D. 1819, a seminibus Capensibus ab ipso collectis ortum.
Obs. Caules ramive senecti prostrati pendulive

2-3-pedales. *Folia* (aëre aperto) utrinque attenuata pallide s. læte viridia sordidè papulosa fere semper canaliculata. *Flores* trichotomi mediocres vel parvuli, primo (extus præcipue) fulvi, sive salmonis carnis colore, basi lutei; mox pallidiores roseive: denique extus rosei, intus plus minus albicantes. *Pedunculi* clavati, uti calyces valde papuloso-nitentes. *Calyx* 5-phyllus ut in affinibus. *Stamina* erecta alba, longitudine varia, luteis antheris pollineve. *Styli* 5 erecti albo-lutescentes læves. *Germen* supra calycem parum elevatum, convexulum 5-loculare.

M. (trailing blush-flowered) foliis linearibus semiteretibus, nitide papulosis: caulibus procumbenti-prostratis, filiformibus. *Nob. in Misc. nat. p.* 57. — *canaliculatum.* 272. *

Obs. Corolla parvula dilute rosea rubicunda. Caules senecti semipedales. Priori simillimum.

M. (green-flowered) foliis semiteretibus papuloso-pilosis, calycibus hirsutis, caudice incrassato: ramis diffusis, nodulosis. — *viridiflorum.* 273.

M. viridiflorum. Ait. kew. ed. 1. *v.* 2. *p.* 196.

Obs. Ab omnibus differt, petalis angustis viridibus!

M. (slender-flowered) foliis semiteretibus obtusis canaliculatis patentibus, crystallino-papulosis: ramis diffusis debilibus cinereis. — *tenuiflorum.* 274.

M. tenuiflorum. Jacq. frag. 52. *f.* 3.

Obs. Flores rubicundi. Non vidi. A Pr. de Salm Dyck.

M. (shrubby, crystalline) fere toto pulcherrime papulosum; foliis semiteretibus: ramis erecto- — *nitidum.* 275. *

effusis nodosis gracilibus : floribus parvis dichotomis luteis. *Nob. in Misc. nat. p.* 57.—*M. brachiatum. Pl. grass. nec Aliorum.*

64. Trichotoma, Suffrutices suberecti ramosi, foliis sæpe subcylindraceis, calyce 5-fido : floribus ternatim 2-3-chotomis, plus minus luteis fulvis, vel rubicundis.

Obs. This Section is difficult to increase by cuttings.

trichotomum. 276. M. (trichotomous) foliis trigonis, caule stricto ramoso angulato, floribus sessilibus (flore rubro). *Thunb. prod.* 89.

Non vidi.

decussatum. 277. M. (crossed) foliis linearibus subpapillosis, floribus terminalibus pedunculatis (albis), caule fruticoso trichotomo. *Thunb. prod.* 88.

An eadem cum sequente?

Non vidi.

brachiatum. 278. M (three-forked) caulibus foliisque cylindricis papulosis, ramis trichotomis (flore luteo). *Ait. kew. ed.* 1. *v.* 2. *p.* 119.

testaceum. 279. * M. (tile-coloured) foliis semiteretibus subtriquetris glaucescentibus, floribus trichotomis testaceis : caule erecto fruticoso. *Nob. in Suppl. pl. succ.* 97.

Obs. Caulis senectus 2-3-pedalis ramosus erectus. *Flores* umbellato-trichotomi terminales parvi testaceo-crocei pedunculati, *Petalis* uniserialibus. *Calyx* brevis, foliolis subæqualibus. *Stamina* et fibrillæ (filamenta imperfecta) in conum niveum nitentem collectæ.

M. (tuberous, shrubby) foliis subtriquetro-compressis minute papulosis supernè recurvantibus, radice senectâ ingenti-tuberosâ. *Linn. sp. pl.* 1. 693.—*Dill. elth. f.* 264. *tuberosum.* 280.

β *minus*; foliis paulo minoribus.

65. Noctiflora, Suffrutices graciles subdefoliatis ramis elongatis erectis simplicioribus duris lævigatis teretibus: foliis distinctis valde deciduis cylindraceis glaucis et fere farinoso-albis remotis impunctatis: floribus sæpe ternis terminalibus: calycibus 4-fidis; corollis mediocribus albis, extus roseis, fulvis vel stramineis, vespere nocteque solum expansis odoratissimis moschatis; radicibus senectis carnoso-incrassatis, fibris paucis. Genus proprium? Antiquorum Botanicorum Nycterianthemum.

M. (lesser rosy night-flowering) foliis subremotis obsolete semicylindricis glaucis, floribus biternato-cymosis intus albis; extus apice luteis phœniceisve, cortice albo. *noctiflorum.* 281.

M. noctiflorum. Linn. sp. pl. 689.

α *phœniceum* (deep rosy-flowered); M. flore intus albo extus phœniceo odoratissimo. *Dill. elth. f.* 262.—*Pl. grass. t.* 10.—*Mesem.* 4. *Mill. dic. ed.* 7.

β *stramineum* (lesser, straw night-flowered); M. flore intus candido, extus stramineo. *Dill. elth. f.* 262.—*M. noctiflorum β. Linn. sp. pl.* 689.—*Mesem. species* 5. *Mill. dic. ed.* 7.

Obs. This is the original *Mesem. fl. extus stra-*

mineo, and should therefore, whether considered as a variety or a species, retain the name of *stramineum,* erroneously often applied to the next species. Both Miller and Dillenius consider the present var. *stramineum* as a species, and it may be such, having larger flowers, and an obovate germen, while that of the var. *phœniceum* is pyriform. Dillenius's figure of *stramineum* is from a young plant, and therefore more robust, and less branched than usual.

γ *elatum* (tall rosy night-flowering); foliis longioribus semierectis triquetro-cylindricis demum reflexis farinoso-albis remotis junioribus canaliculatis; ramis elatis simplicioribus; cortice lævigato albo: floribus ternatis.

E regio horto Kewense, a Capensibus seminibus ortum, A.D. 1819.

Obs. Rami (in seminalibus plantis) strictissimi virgati usque ad 3 pedes et ultra, tunc florentes; ante florescentiam simplicissimi. *Flores* (Augusto) terminales sub-3 s. 5, di-trichotomi nocturni, extus saturate rosei phœniceive, intus albi. Prioribus elatius, minus ramosum, cortice foliisque majoribus pallidioribus.

A sequente specie dignoscitur foliis erectō-reflexis etiam majoribus, nec horizontalibus, petalorumque colore.

Forte propria species.

fulvum. 282. * M. (grey-barked, tawny night-flowering) foliis remotis subcylindricis glaucescentibus, exacte semierectis: floribus ternatis fulvis intus albis: cortice cinereo-fusco. *Nob. in Misc. nat.* 63, excluso synonymo Dilleniano et Linn.

Obs. Priore majus, elatius, minus ramosum. *Flores*

pauciores, minus cymoso-dichotomi. *Radices* senectæ carnosæ, et fere fusiformes. *Cortex* subjunioris cinereus. *Germina* turbiniformia.

OBS. Printed names of plants should seldom be changed without apology, and never without a good reason. And perhaps, the only allowable reasons are, when the name is erroneous through preoccupation; or where it misleads through some variance with truth. Such, for instance, as the calling a plant American, which is not indigenous to America; an annual by a perennial name; or a flower yellow, when it is not of that colour. And hence the change of the present fulvous flowered species (heretofore called by us *stramineum*) to fulvum, is allowable. The error arose in *Syn. succ. p.* 261, on our elevating two varieties, given as one species, into two species; calling the horizontal-leaved straw-flowered one, *horizontale*; and leaving the other, though a fulvous-flowered one, in possession of the specific name of *stramineum;* which (belonging to another) was wrong; and its rectification in the present place should be considered as an improvement.

M. (clubbed night-flowering) foliis semiteretibus, pedunculis terminalibus aggregatis clavatis, cymosis. *defoliatum.* 283. *
M. clavatum; foliis subteretibus impunctatis distinctis, pedunculis clavatis, calycibus quadrifidis. *Jacq. hort. schœnb. t.* 108.—*M. defoliatum. Nob. in Misc. nat.* 84.

M. (spread-leaved straw night-flowering) foliis remotis subcylindricis glaucis exactè horizontalibus: floribus ternatis stramineis intus albis. *Nob. in Syn. succ. p.* 261. *horizontale.* 284. *

An varietas M. defoliati supra? An idem?
Exempla parva M. defoliati mortua (ob longum iter) solum vidi, a Principe de Salm Dyck, et amico V. Marum, Æquite.

66. Aspericaulia, Suffrutices vix sesquipedales ramosi, ramulis filiformibus scabris: foliis distinctis, remotis papuloso-micantibus; floribus antemeridianis aurantiis rubicundisve.—Hæ plantæ ob micantia folia, coruscantem cohortem efficiunt.

† Floribus magnis coccineo-aurantiis flavisve.

specio-sum. 285. * M. (glittering orange) foliis semicylindricis subulato-subacutis incurvis submicantibus: calycinis laciniis petalisque obtusis: corollis subinfundibuliformibus.—*Nob. in Misc. nat.* 98.

Obs. Corolla magna atro-coccinea, basi viridis: minus expansa ad solem, potiusve basi magis subcampanulata quam in aliis.

micans. 286. M. (glittering dark-orange) foliis semicylindricis obtusiusculis subrecurvis valde micantibus, calycinis laciniis petalisque subacutis.

M. micans. Linn. sp. pl. 696. *Dill. elth. f.* 282.

Obs. Corolla magna, basi purpurea intus saturatè coccinea, filamentis atris extus pallidioribus. *Folia* valde scintillantia.

β. paulo minus. *Nob. in Misc. nat.* 98.

macula-tum. 287. * M. (lesser glittering) foliis expansis remotis obtusis compresso-semicylindris; caulibus exasperatim maculatis erectis. *Nob. in Misc. nat.* 98.

†† Floribus parvis rubicundis.

M. (small glittering, yellow) foliis semiteretibus *flavum.*
teretibusve utrinque sub-attenuatis micantibus, 288.
incurvo-erectis varieve flexis; ramis tenuissime *
filiformibus: floribus flavis.

Viget in regio horto Kewense e C. B. S. A.D. 1820.

Floret Aug. G. H. ♄.

Obs. Suffrutex suberectus ramosus semi-pedalis ramis gracillimis crebrè punctato-scabris. *Folia* senecta sæpius teretiuscula, supra rarius planiuscula, ad lucem papuloso-scintillantia. *Flores* solitarii terminales. *Pedunculi* filiformes bracteas duas exacte foliiformes in medio gerentes. *Calyx* obtusè et subæqualiter 5-fidus. *Corolla* A. M. expansa parvula, semunciam lata, *petalis* pauculis lucidis latis flavis aureisve, extus supernè sæpe rubicundis. *Stamina* filamenta brevia alba erecta. *Antheræ* parvæ pallidæ s. lutescentes *polline* fere concolores. *Stigmata* 5 parva recondita inter stamina, demum patula, (ad lentem) subulata ramentacea luteo-virescentia.

Obs. M. specioso proximum, sed in omnibus 3-4-plo minus. Simulat etiam M. micantem, at minus micans, et fere omnino absque filamentis petalinis atris.

M. (bright afternoon-flowering) foliis distantibus *obli-*
cylindraceis obtusis parvis papuloso-nitentibus, *quum.*
uno singulo pari deflexo, altero adscendente, ra- 289.
mis filiformibus duris asperiusculis suberectis. *

Fruticulus pedalis e regio horto Kewense, A.D. 1819, a Capensibus seminibus ortum.

Flores parvi alte rubicundi solitarii terminales meridiani.

β. ramis præcipue inferioribus magis patentibus.

Vidi apud Kew A. D. 1820.

parvifolium. 290. * M. (small triquetrous glittering) foliis graniformibus expansis obtusè triquetris papulosis submicantibus: ramis subconfertis filiformibus asperis duris suberectis.

Vigebat in regio horto Kewense A. D. 1820, a Capensibus seminibus ortum.

Obs. Fruticulus subdensè ramosus (secundo anno) vix semipedalis, suberectus. *Rami* filiformes rufescentes asperiusculi ut in priore, numerosi. *Folia* (aëre aperto) patula, obtusula, brevia, crassa, subcompresso-triquetra, aliquantillum incurvula indeque subcymbiformia, potiusve formâ Tritici seminis at (in senectis) duplo minora; ad solem obsoletè papuloso-micantia, præcipue in viridario, ibique longiora. *Flores* (Junio) terminales in ramulis superioribus et (si benè cultum) numerosi subcymosi, *pedunculis* subsemuncialibus filiformibus calycem versus bracteis duabus omnino foliiformibus, instructis. *Calyx* 5-fidus, foliolis subæqualibus subobtusis foliiformibus, &c. ut in affinibus. *Corolla* saturanter purpurea fere ut in M. hispido, at 2-3-plo minor, diurna, petalis subuniserialibus acùtis integris angustis. *Stamina* filamentis erectis distinctis, purpureo-roseis, non confertis vel convergentibus, antheris parvis albis, polline pallido, vix lutescente. *Germen* micans pyriforme (ad lentem) semisuperum 5-loculare supernè costatim 5-angulare, *stylis* 5 erectis ovato-lanceolatis ramentaceis viridibus.

Obs. Folia in juvenili planta 3-plo longiora quam in senectis, ut in plurimis.

M. (small short-leaved glittering) foliis cylindraceis obtusissimis patentibus; brevibus; ramis numerosis, diffusis filiformibus. *brevifolium.* 291.
M. brevifolium. Ait. kew. ed. 1. *v.* 2. *p.* 188.

M. (small globular-leaved) foliis expansis brevissimis vel subgloboso-cylindraceis; ramis numerosis filiformibus divaricatis subdecumbentibus. *subglobosum.* 292.
M. capillare; foliis subglobosis, caule rigido ramoso, ramulis filiformibus, floribus pedunculatis (rubris). *Thunb. prod.* 89. *nec Aliorum.*—*M. subglobosum. Nob. in Syn. succ.* 273. *

M. (sessile) foliis trigono-globosis glabris, caule erecto tereti ramoso; floribus sessilibus (rubris). *Thunb. prod.* 89. *sessile.* 293.
An hujus sectionis? An idem cum M. cymbiforme supra, vel priore? Vix.
Non vidi.

M. (powdered) foliis cylindrico-triquetris obtusis, punctis albis, pulverulentibus scabris; calyce sexfido, petalis rubicundis. *Nob. in Misc. nat. p.* 99. *pulverulentum.* 294. *
Florem unum, facie M. barbati, solum vidi.

M. (pruinose) foliis trigonis papulosis, caule decumbente frutescente (floribus luteis). *Thunb. prod.* 90. *pruinosum.* 295.
Non vidi. Vix præcedentis varietas.

67. Hispicaulia, Suffrutices dumosi subdodrantales, caulibus pedunculis-

que hispidis: floribus antemeridianis rubicundis albisve.—Hæce plantæ rursum scintillantes ad solem, splendentem familiam constituunt.

hispidum. 296. M. (hispid-stalked) foliis cylindricis obtusissimis calyceque glabro obconico viridibus papuloso-micantibus: staminibus pistillo longioribus.
M. hispidum. Linn. sp. pl. 691.
α *Dillenii* (the bushy); M. papulosum micans, flore saturate purpureo. *Dill. elth. f.* 278.
Obs. Dumosum; ramis subconfertis. *Folia* læte viridia. *Flores* in ambabus varietatibus saturate rubicundi.
β *platypetalum* (tall hispid-stemmed) ramis simplicioribus distantioribus elatioribus: foliis remotioribus: petalis saturanter purpureis paucioribus latioribus.
Fortasse propria species.
Communicavit A. D. 1820 amicus Dom. Burchell, qui in Africa (C. B. S.) legit spontaneum. G. H. ♄.
Cum priore floret.

hirtellum. 297. * M. (large-flowered, hispid) foliis confertis cylindricis obtusissimis crystallino-papulosis; calyce turbinato papulose piloso: staminibus longitudine pistillorum. *Nob. in Misc. nat. p.* 102.
Obs. Quam affinibus corolla plus duplo major, pallescens, at hilariter rubicunda, basi læte alba, speciosa.

candens. 298. * M. (pale, icy, trailing hispid) foliis cylindraceis incurvis crystallino-canescentibus obtusis scintillantibus: ramis longis debilibus procumbentibus prostratisve.

M. hirtellum. Cat. hort. dyck. A.D. 1820. *p.* 24, *nec Nob.*

Obs. Priori valde affine, at ramis 3-plo plusve longioribus rectis, *foliis* minoribus magis cano-coruscantibus.

Flores non vidi.

Communicavit illustr. Pr. de Salm Dyck A. D. 1820 et 1821.

M. (crowded-flowered, hispid) foliis subcylindraceis subincurvis papulosis obtusis; calycibus hemisphæricis papulosè pilosis confertis: staminibus pistillis brevioribus: ramis numerosissimis patulis. *Nob. in Misc. nat. p.* 100, exclusis synonymis. *floribundum.* 299. *

M. (twisted hairy-stemmed) foliis subcylindraceis incurvis canescente-viridibus papulosis obtusis: calycibus hemisphæricis papuloso-pilosulis numerosis: staminibus pistillis longioribus: ramis tortuosis subdecumbentibus. *torquatum.* 300. *

M. pilosum micans flore purpureo pallidiore. Dill. elth. f. 279. 280. — *M. floribundum. Cat. hort. dyck. A.D.* 1820, *p.* 24, *nec Nob.*

Obs. Rami longiores quam in priore, magisque procumbentes, senecti sæpe valde tortuosi sive torquati, graciles. *Folia* duplo graciliora, magis incurva, minus viridia. *Flores* pauciores distantiores.

Communicavit illustr. Pr. de Salm Dyck A. D. 1820.

M. (long-cupped, hispid) foliis cylindricis tenuioribus; foliolis calycinis duobus foliaceis cæteris productim duplo longioribus. *calycinum.* 301. *

Vigebat in regio horto Kewense, e seminibus Capensibus ortum, A. D. 1819.

Obs. *Rami* semipedales effusi graciles hispidi pilis horizontalibus validis. *Folia* cylindracea fere filiformia papuloso-nitentia obtusa, duplo graciliora uti rami, quam in priore et pauciora remotioraque. *Flores* (in Jul. Aug. Sept.) antemeridiani albi. *Pedunculi* solitarii terminales pilis albis, s. setis horizontalibus, vel deflectentibus hispidi, apice cum calyce papuloso crystallini. *Calyx* 5-fidus laciniis obtusis foliiformibus, 2 brevibus, tertia longiore, 4 et 5, 2-3-plo cæteris longioribus. *Corolla* parvula alba, petalis sæpe emarginatis vix longitudine calycis foliorum elongatorum: interiora petala pauca, sensim sensimque minora. *Filamenta* extima erecto-recurva numerosa alba, petalis triplo breviora, antheris albis impotentibus absque polline: intima lutescentia erecta, *antheris* parvis luteis, polline luteo. *Germen* fere inferum. *Styli* 5, erecti minuti acuminati, antheris (intimis exceptis) humiliores, post anthesin subrecurvantes.

striatum. 302. * M. (striped-flowered bristly) erectum: foliis subulatis semicylindricis, calycibus lanuginosis: staminibus collectis longitudine pistillorum: capsulis apice altè angulatis.

α *roseum*; petalis albo-roseis costa rubra.

M. striatum. Nob. in Misc. nat. 108.—*M. purpureum micans, flore purpureo striato. Dill. elth. f.* 281.

β *pallens*; petalis albis, costa basi rubra: morientibus parum roseis. *Plant. grass. t.* 132.

attenuatum. 303. * M. (slender hispid) gracile: foliis farctim semicylindris obtusis subteretibusve: calycibus basi hir-

sutis; pedunculis longis, ramulisque decumbentibus, filiformibus.

Florebat in regio horto Kewense Jul. 1821, a Capensibus seminibus nuperrime ortum.

Obs. M. striato proximum, at omni parte 3-plo minus, decumbens, valde gracile. *Pedunculi* longiores læte rosei. *Calycis* foliola subrecurva dum flores antemeridiani aperti sunt. *Petala* innupta alba, costâ apiceve læte roseâ, inde circulus per florem roseus, pulcher transit, Bellidis instar, exactè, concinnè.

M. (hispid-leaved, bristle-stemmed) ramis foliis pedunculis calycibusque hispidis. *Nob. in Suppl. pl. succ. p.* 94. *hispifolium.* 304. *

Obs. Dignoscitur primo intuitu, foliis uti ramis hispide-pilosis; capsulis minus apice angulatis. Cæteris cum M. striato convenit.

Variat

α *fastigiatum* (pale-flowering level-topped); floribus numerosis formosis fastigiatis, petalis albis costa rubra, senectis roseis, foliis pilosioribus: capsulis minoribus.

β *roseum* (rosy-flowered); majus; floribus roseis, costa rubra, non fastigiatis; foliis minus hispidis: capsulis majoribus.

68. Echinata, Suffrutices subsemipedales valde ramosi; foliis undique plus minus hispidis, caulibus sæpius nudis.

M. (Hedgehog) foliis oblongo-ovatis farctim subtriquetris gibbis: calycinis laciniis præinæqualibus foliiformibus ramentaceo-hispidis longitudine petalorum. *Ait. kew. ed.* 1. *v.* 2. *p.* 194. *echinatum.* 305.

α. flore luteo.
β. flore albo.

strumosum. 306. M. (tuberous, Hedgehog) foliis confertis depresso-cylindraceis undique hispidis; radice senecto tuberoso.

E regio horto Kewense, ex C. B. S., A. D. 1820.

Radices senectæ semimagnitudine pugni. *Rami* e summo tuberis erecto-effusi decumbentes breves. *Folia* fere ut in M. echinato at longè angustiora minus gibba, pilis mollioribus numerosioribus. *Flores* (1 solum examinavi Augusto 1820) expansi A. M. terminales fere solitarii, pedunculo brevi piloso, cum calyce pilis respicientibus. *Calyx* 5-fidus, laciniis brevibus subæqualibus ut in plurimis. *Corolla* pallide straminea sive albicans. Cætera non examinavi.

β. foliis saturatioribus paulo minoribus.

69. Barbata, Suffrutices 2-11-entales plusve, foliis nudis apice radiatim stellato-barbatis setis pallidis.

barbatum. 307. M. (shrubby trailing-bearded) procumbens: foliis remotis suboblongis exactè semierectis, supra planis crassis papulosis, apice sub-5-radiatis, ramulis senectis prælongis gracilibus nudis: calyce 5-fido, laciniis perinæqualibus.

M. barbatum. Linn. sp. pl. 691.—*Dill. elth. f.* 234.

stelligerum. 308. * M. (upright bushy, bearded) erecto-decumbens, foliis remotiusculis suboblongis patenti-horizontalibus, supra planiusculis crassis papulosis, apice subsexradiatis, ramis longis gracilibus nudis;

calyce 5-fido laciniis æquali longitudine. *Nob. in Syn. succ.* 278.—*Bot. magaz. t.* 70.

Obs. Priore ramosius, foliis magis expansis. Forte mera varietas, at e seminibus constans.

M. (small, bearded) foliis (ramulisque brevibus grossis) cæspitosis canis crassis semiteretibus, papuloso-scabris, apice multiradiatis, basi ciliatis: pedunculis calycibusque 6-8-fidis hirsutis. *stellatum.* 309. *
M. stellatum. Pl. grass. 29, cum icone.—*M. hirsutum. Nob. in Misc. nat.* 105.—*M. barbatum* β. *Linn. sp. pl.* 691.—*Dill. elth. f.* 235.

Obs. As this plant is the real *M. stellatum* of Decandolle and others, and is well figured in *Pl. gr.*, I have relinquished the name of *hirsutum*, which I had formerly applied to it.

M. (dwarf, bearded) densissime cespitosum: foliis semiteretibus papuloso-scabris, apice multiradiatis, basi subciliatis virescentibus: pedunculis calycibusque 6-fidis hirsutissimis: caudice senecto præcrasso ramuloso brevissimo. *Nob. in Misc. nat.* 105.—*M. barbatum* γ. *Linn. sp. pl.* 691.—*Dill. elth. f.* 236, at sine rarissimis floribus. *densum.* 310. *

SPECIES INCERTAE.

1. M. elegans. *Cat. hort. Belvidere.*
2. M. serratifolium. *Ibid.* (Forte M. serrulatum *Nob.*)
3. M. blandum. *W.*
4. M. cornutum. *W.*
5. M. Milleri. *W. enum. suppl.* 37.
6. M. suaveolens. *Jacq. frag.* 99. 1.
7. M. multiradiatum. *Jacq. frag.* 53. 1. Duas

ultimas figuras insufficienter vidi. Prima est affinis M. papuloso; alter forte M. *incurvo*, Nobis.

HYMENOGYNE. Mesembryanthemum *Linn. &c.*

Styli sub-12 confluenter adnati internè ad tubum delicatulum infundibuliformem: stigmatibus brevibus liberis, tubo humilioribus. *Capsula* 1-locularis polysperma (maturam solum examinavi). *Semina* magna fusca rotunda plana s. hinc convexula nuda nitentia, illinc concava ramentacea: membranâ magnâ marginata, s. alata.

Genus præsingulare distinctissimum: sectionem novam in FICOIDÆIS propter capsulam 1-locularem formavit.

Herba e C.B S. glabra nuda formâ fere omnino Mesem. Helianthoidis, *Ait. nec Decand.* radice annua, equitantibus petiolis.

glabra. H. (smooth).
1. *Mesembr. glabrum. Ait. kew. ed.* 1. et 2.

Herba 6-9-uncialis debilis parum ramosa. *Rami* oppositi teretes debiles, s. decumbentes virides, vel superne rufescentes. *Folia* longè petiolata spathulato-lanceolata viridia sine punctis papulisve, basi utrinque ramulos dilatatim subequitantia! *Pedunculi* foliorum longitudine plusve et medio, e bracteis omnino foliiformibus, sæpe ramosi, graciles teretes. *Calyx* hemisphæricus foliolis longis inæqualibus linearibus acutis pla-

niusculis, potiusve utrinque convexiusculis, basi dilatatis, minoribus, tribus plus minus membranaceis, eorum minimo magis membranato. *Corolla* semuncialis diurna, petalis uniformibus numerosis lucidissimè stramineis ipsa basi rufescentibus, apice acuto subintegro. Intra veros petalos circulus densus e fibrillis staminiformibus convergentim erecto-recurvis rufo-croceis, sine antheris, antherisque duplo humilioribus. Intra circulum *Filamenta* vera, valida, plano-linearia erecta crocea, apicibus saturatioribus, *antheris* parvis fuscis, polline pallido. *Styli* sub-12 longi, sed omnino confluentèr adnati internè ad tubum viridem cylindraceum (apice purpureo patulo subcrenulato) staminibus longe humiliorem. *Stigmata* sub-12 brevia (lènte) ramentacea, supernè solum tubo libera eoque longe humiliora. *Germen* quasi sub-12-loculare, calycis figurâ, foliaque calycina quasi gerens; at capsula demum unilocularis est.

SYNGENESIA. Polygamia Æqualis.

KLEINIA. *Linn. in Hort. cliff.—Nob. in Syn. succ.* 312. *Cacalia Aliorum.*

K. (dagger-leaved) foliis decussatis incurvo-erectis sesqui-semiteretibus subulatis glaucis striatulis: senectis valde elongatis. *longifolia.* 1.

Habitat .... G. H. ♄. *

Obs. Conspicua species, dodrantalibus omnium

longioribus foliis, paginis interioribus aliquantillum planato-depressis.

Nuperrime communicavit illustr. Pr. de Salm Dyck, nomine Cacaliæ pugioniformis, et diffidenter aptiorem fortasse proposui.

SYNGENESIA.

Polygamia Necessaria.

OTHONNA. *Linn. &c.*

Recept. nudum. *Pappus* pilosus. *Calyx* 1-phyllus multifidus.

pinnata. 1. O. (wing-leaved) foliis carnosis glaucis pinnatifidis: pinnis subspathulatis integerrimis decurrentibus: radice tuberosa. *Willd. sp. pl.* 3. 2373.—*Bot. mag.* 768.
Habitat C. B. S.
Cult. 1759. G. H. ♃.

pectinata. 2. O. (hoary, or Wormwood-leaved) foliis carnosulis pinnatifidis tomentosis: laciniis linearibus margine exteriore subdentatis, caule fruticoso. *Willd. sp. pl.* 3. 2374.—*Bot. mag.* 306.
Habitat C. B. S.
Cult. 1731.
Floret Mai.—Jun. G. H. ♄.

O. (Buck's-horn-leaved) foliis infimis lanceolatis integerrimis carnosulis glaucis; superioribus sinuato-dentatis. *Willd. sp. pl.* 3. 2375.— *Jacobea &c. Comm. hort.* 2. *t.* 70. *Coronopifolia.* 3.
Habitat C. B. S.
Cult. 1731.
Floret Jul.—Sept. G. H. ♄.

O. (Stock-leaved) foliis lanceolatis trinerviis integerrimis carnosulis glaucis: caule suffruticoso repente. *Cheirifolia.* 4.
Habitat C. B. S.
Cult. 1752.
Floret Apr.—Jun. G. H. ♄.

O. (thick-leaved) foliis lanceolatis integerrimis crassis subcarnosis, caule erecto. *Willd. sp. pl.* 3. 2376. — *Mill. icones* 2. *p.* 164. *t.* 245. *f.* 2. *crassifolia.* 5.
Habitat C. B. S.
Cult. ante 1810.
Floret Sept.—Oct. G. H. ♄.

O. (tooth-leaved) foliis oblongis carnosulis glaucis glabris denticulatis, basi attenuatis amplexicaulibus; floribus paniculatis. *Willd. sp. pl.* 3. 2376. *denticulata.* 6.
Habitat C. B. S.
Introd. 1774.
Floret Apr.—Mai. G. H. ♄.

O. (bulbous) foliis ovatis subdentatis, pedunculis unifloris longissimis; radice tuberosa. *Willd. sp. pl.* 3. 2377. *bulbosa.* 7.
Habitat C. B. S.

INTROD. 1774.
FLORET Mai.—Jun. D. S. ♃.

perfoliata. 8. O. (perfoliate) foliis cordatis carnosulis amplexicaulibus glaucis, caulibus herbaceis, pedunculis unifloris. *Willd. sp. pl.* 3. 2072.—*Amplexicaulis. Bot. mag.* 1312, exclus. synon.

Cacalioides. 9. O. (fleshy obovate-leaved) carnosa nuda lævis palmaris, foliis fasciculatis obovatis sessilibus, pedunculis unifloris. *Willd. sp. pl.* 3. 2382.
HABITAT C. B. S.
INTROD. 1774.
FLORET Mai.—Nov. G. H. ♃.

filicaulis. 10. O. (Yam-rooted) foliis integerrimis: radicalibus cordatis; caulinis ovato-lanceolatis basi cordatis amplexicaulibus, caule flaccido filiformi ramoso. *Willd. sp. pl.* 3. 2377. — *Jacq. hort. schœnbr. t.* 241.
HABITAT C. B. S.
INTROD. 1791.
FLORET Apr.—Mai. G. H. ♃.

MONŒCIA. POLYGYNIA.

BEGONIA. *Linn. &c.*

dubia. 1. B. (dubious.) *Nob. in Suppl. p.* 101.
OBS. I believe this may be the same as the *B. pauciflora* of *Bot. reg.* 471, and that *B. patula, Nob. in Suppl. succ.*, is a different plant. But

for the present article *pauciflora* is not a very applicable name.

B. (the polished) foliis semicordatis duplicato-dentatis strigose ciliatis supra hispidulis, caulibusque polite lucentibus: capsulis trilocularibus, alis rotundatis subinæqualibus. *lucida.* 2. *

Exstat in hort. Chels. ex Insula Trinitate.

Herba annua, tota (corolla strigisque paucis exceptis) lævigate lucens. *Caules* succulenti erecti at debiles 2-pedales parum ramosi. *Rami* læves suberecti teretes rubentes striatuli, subtumentibus nodis; supernè vix crassitie coracis pennæ. *Folia* distantia, supra saturatè viridia pracè strigosa at politè nitentia; *subtus* nuda, pallescentia e punctulis (ope lentis) creberrimis regularibus rotundis, ad lucem albicante-nitentibus. *Flores* fere ut in figura B. humilis Dryand. *Linn. trans. v.* 1. *t.* 15, at forte pedunculis longioribus; perfectos non examinavi. Affinis maximè B. humili.

B. (Elm-leaved) erecta: foliis utrinque hispidis inæqualiter oblongis duplicato-dentatis; capsula ala maxima acutangula, reliquis obtusangulis. *Pers. syn.* 2. 564. *Ulmifolia.* 3.

Habitat in Americ. merid. St. ♄.

Vigebat in hort. Chels. et apud Dom. Loddiges A. D. 1820.

B. (the silver-spotted) foliis semicordatis viridibus, maculis sparsis rotundis nitide argenteis pulcherrimis: subtus sanguineis immaculatis. *argyrostigma.* 4. *

Viget sub hoc nomine apud Dom. Loddiges. St. ♃.

Vere eximia herba, Begoniarum formosissima, e

maculis quasi metallicis coruscantibus; sanguineoque colore.

picta. 5. * B. (hairy silver-spotted) foliis hirtis imis inæqualiter, cæteris pedetentim magis toto cordatis, punctis argenteis coruscantibus.

Obs. E Nepaul. Viget in hort. Chels. et etiam apud Dom. Loddiges (sub hoc nomine) radice tuberose granulata, si eadem; at unum parvum folium e radice quiescente solum vidi. In hort. Chels. fere 3-uncialis est, summis foliis fere exactè cordatis, duplicato-dentatis, at infantilis planta solum.

ADDITAMENTA QUÆDAM.

PIPER. *Linn. &c.*

concinnum. 1. * P. (small heart-leaved) nudum; læve: foliis alternis patulo-pendulis cordatis obtusis 5-nerviis lucidis, petiolis decurrentulis internodio 2-plo, laminis triplo brevioribus: ramulis gracilibus flexuosis.

Habitat in Jamaica.

Introd. a Dom. Loddiges 1821. St. ♄.

Flores non vidi.

P. pellucido simile, at non annuum teneris foliis, caule subrecto; sed fruticulus 6-unc. ramulis (in petiolorum lapsorum locis) noduloso-cicatrizatis, foliis crassis uncialibus.

CEROPEGIA. *Linn.* &c.

C.? (straddling, Pod-leaved) ramis effuse dichotomis decumbentibus: foliis lanceolato-oblongis leguminiformibus torulosis. *torulosa.* 1. *

Vigebat in regio horto Kewense A. D. 1821.

A C. B. S.

Obs. Suffrutex succulentus Piperis facie, valde ramosus. *Rami* dodrantales subdivaricati, graciles erecto-decumbentes teretes. *Folia* opposita expansa unciam longa, utrinque farctim convexa subbullulata, sordide viridia internodiis breviora, petiolis lineam longis filiformibus.

Flores non vidi.

STAPELIA. *Linn.* &c.

Obs. Stapelia crassa. *Donn. hort. cant. ed.* 6. *p.* 67, est varietas crassior Huerniæ reticulatæ *Nob. in Syn. succ.* 28.

Ab ipso Donnio accepi A.D. 1812.

During the printing of the preceding pages, the following articles have occurred, which may be worthy of being briefly noticed.

CRASSULA.

C. (latchet-leaved) foliis liguliformibus albo-dense-cartilagineo-ciliatis obtusis concaviusculis, sudtus convexulis: cauliculo suffrutescente. *ligulifolia.* 1. *

Habitat C. B. S.

Viget in regio horto Kewense. Cauliculi (primi anni a semine) 3-4-unciales imbricatim decussate foliosi, exacte ut in C. ciliari; a qua differt solum in foliis duplo longioribus, sed an-

gustioribus etiam duplo: sive 2 uncias longis, 3-4 lineas latis. Cilia fere lineam longa recta obtusa contigua nivea et concinnè parallela.

Nondum floruit. G. H. ♄.

concinna. 1. * C. (small neat ciliate) foliis obovatis concinnè niveo-altè-ciliatis.

Habitat C. B. S. Cum priore e semine. viget in regio horto Kewense. G. H. ♄.

Plantam primi anni 3-4-entalem solum vidi. C. ciliatæ simillima, at minor, foliis latioribus ratione longitudinis.

Nondum floruit.

Obs. The beautifully fringed imbricating leaves of these Crassulæ have been aptly compared by a lady, to a Lobster's tail, which indeed they resemble considerably. The fringes are neat objects through a pocket lens, and almost each hair appears to arise from a small bulbous base, and to be accompanied with a glandular pellucid dot of a different nature, within the very margin of the leaf, as in the Genera above called *Kalosanthes* and *Curtogyne*: but the cilia in the former genus are very different to a botanic eye; being merely beautiful crystalline globes, analogous to the small bulbous bases above mentioned, but far more crystalline: in the latter genus they are reniform: and by those shapes alone we can (without flowers) safely refer any new species to their proper places, which otherwise in leaf, are extremely similar. The Crassulæ *Ciliatæ* may perhaps themselves be a Genus, but I have not recently been able to examine their flowers. They have not the long tube of *Kalosanthes*, and in habit they differ from *Curtogyne*; but I know not the shapes of their germs and styles.

TURGOSEA, supra, *p.* 14. *pertusa.* 1. *

This species has flowered again. Its thyrsiferous scapes are now 9 inches high, each with nearly 40 decussating, gradually lessening upward, erect-incurving, foliaceous bractes: the tenth or eleventh pair of which bear solitary shortly pedicelled flowers in their axillæ; the twelfth and higher pairs from two to six flowers each; with their pedicelli often elevated on a common peduncle one line in length supported by two foliaceous bractes longer rather than the peduncle.—The superior flowers of the graceful, reversely-villose, spike-shaped thyrsus are higher than their main bractes, which gradually lessen to nothing. The bloom (in the day time only) has the sweet fragrance of the Hawthorn's blossom, with something more approaching to the Heliotrope;—the leaves and bractes are often deeply embued with red, enhancing the beauty of the small snowy recurving petals, and reflecting over them, in peculiar lights, a very soft rosaceous shade. The ordinary squamula is rhombically obcordate: the germs are green, pressed to each other and flattened within, but externally gibbous, and nearly the shape of a raisin stone, having very short blunt continuous styles, and without any apparent stigma, even through a common pocket lens.

APICRA. *Willd. et Nob. in Supp. succ.* 61.

β torulosa; A. (spongy-flowered pentagonal) foliis subquinquefariis pallide viridibus glabris; subtus obsolete maculatis: perigonii angulis spongiose torulosis. *pentagona.* 1. *

Aloë pentagona. Salm. cat. rais. d'aloë, p. 10.—*Non Nob. &c.*

Floret Octob.

Ex ipso Principe de Salm Dyck accepi A.D. 1821.

Ab omnibus (2 exceptis) mihi cognitis plantis differt charactere rarissimo, in corollarum angulis spongiosè torulosis rugulosisve. Hunc characterem in Apicra imbricata, et Aletride farinosa *Linn.* solum vidi vel audivi. In Apicra pentagona, *Nob. l. c.* (Aloë pentagona. *Bot. magaz.* 1338) perigonium læve est, et A. imbricata ab supra dicta A. pentagona, var. torulosa, in statura &c. longè discrepat.

Obs. Apicra pseudo-rigida *Nob. in Suppl. pl. succ.* 62, vix est hujus Generis, ob habitum fere ut in Haworthia tortuosa, et bilabiatos (a me non visos) flores forte obtinet.

Obs. In Apicra, duæ sectiones exstant, viz. *Erectæ,* foliis erectis valde pungentibus induratis; et *Patulæ,* foliis patulis pungentibus abbreviatis induratissimis.

Obs. *Apicra* aspera, minor, et var. β. duplo major; forte duæ species sunt, ob tuberculorum nervorumque differentiam; at β non possideo, neque (nisi parvam) α, ab Illust. Pr. de Salm Dyck.

ALOË *Linn. &c.*

brevifolia. 1. * A. (lesser, proliferous) subacaulis foliis lanceolatis acutis glaucis: marginibus carinaque apice spinosis vix cartilagineis: subtus subtuberculatis.

Aloë (*brevioribus*) *foliis &c.—Mill. dic. ed.* 8.—*Pl. grass.* 81.—*Hort. kew. ed.* 2. *v.* 2. *p.* 294. *Nob. syn. succ.* 80.—*Al. prolifera. Nob. in Linn. tr. v.* 7. 16.—*Al. afric. caul. fol. glauc. breviss. Comm. præl.* 22.

prolifera. 2. * A. (great proliferous) subacaulis: foliis ovato-lanceolatis acutis glaucis: marginibus carinaque

apice remotiuscule spinosis vix cartilagineis: subtus subtuberculatis.

Aloë prolifera β. major. Salm. cat. rais. d'al. p. 23.—*Nob. in Suppl. pl. succ. p.* 44.

Priore foliis duplo majoribus, spinis marginalibus remotiusculis.

Obs. Hæc et præcedens, cum A. *depressa*, necnon A. *serra*, sectionem novam Proliferam efficiunt, radicibus valde soboliferis, floribus anguste thyrso-spicatis, ante aperientiam acutioribus quam aliis, apicibus minus rectis.

GASTERIA. *Duvall. et Nob. in Syn. succ.*

G. *Nob. in Syn. succ.* 87. *carinata.* 1.

Obs. Varietatem habeo a Dom. Hitchin, pulchriorem *pallidiorem.*

G. *supra p.* 46. Habeo plantam ab amico Dom. Aiton, foliis 3-uncialibus, unciam latis, semunciam crassis obtusis sordidè albo magnipunctatis, apicem versus minute serrulatis, cum mucrone conspicuo terminali. *mollis.* 2.

HAWORTHIA. *Duvall.* Aloë *Linn. &c.*

H. *Nob. in Syn. succ.* *granata.* 1.

Apicra granata *Willd.*

Varietatem habeo *polyphyllam,* a Dom. Jos. Hooker foliis duplo numerosioribus, margaritis crebrioribus.

P.S. The following have also occurred since the preceding pages were printed.

Stapelia conspurcata. *Jacq.* (Orbea ?) 1.

normalis. *Jacq.* (Orbea ?) 2.

3. mastodes. *Jacq.* (Duvallia?)
4. rugosa. *Jacq.* (Podanthes?)
5. mutabilis. *Jacq.*
6. conspurcata. *Jacq.*

OBS. These Stapeliæ are all in the collection of the author's friend Mr. Hood of South Lambeth, a very zealous though young collector of succulent plants, and who already flowers these difficult plants much better than any one the author knows.

7. * CRASSULA *conspicua:* (broad, fringed-leaved) foliis decussate capitatis expansis orbiculato-cuneatis canescentibus, pube adpressa brevissima: ciliis validis albis subrespicientibus.

Planta 3-entalis, caule forsan fruticuloso apud Kew, et nuperrime cum sequente e C. B. S.

Folia 3-entalia 2 uncias lata plana carnosa. Crass. Cotyledoni forte affinis.

8. * CRASSULA *obliqua β. rufo-cincta:* (rufous edged) foliis oppositis obovatis basi uno latere obliquis integerrimis margine lividi-rufo.

Plantæ nunc subtrientales, caulibus forsan fruticulosis, foliis non nitentibus ut in C. obliqua, sed luridioribus. Fortasse propria species.

9. ALOË *tenuifolia. Willd.* (thin-leaved) From the Prince de Salm Dyck; and also from Mr. Otto, to Chelsea Garden.

10. * GASTERIA *denticulata γ:* apud Kew, nuperrime a C. B. S. Duæ incipientes plantæ, foliis nunc ensiformibus acutis integris albo perbelle magnipunctatis biuncialibus. Forsan propria species.

GASTERIA *acinacifolia γ, patula:* foliis breviori- 11.
bus patentioribus, magis albo-maculatis, floribus *
minus elongatis. Apud Kew.

GASTERIA *candicans,* supra *p.* 46. Nunc gerit 12.
apud Kew folium unicum uno latere truncato- *
carinatum; sed bona species.

SEDUM: *Linn. &c.*

S. (Houseleek-like) *supra p.* 32. *Semper-*
OBS. This plant is supposed to be a Canary one. *vivoides.*
At present it resembles a hen and chicken House- 1.
leek, but is scarcely half so large, with shorter *
but probably more dilated and naked leaves, with ciliate edges. It is yet very young. It is probably a Sempervivum, with a diminished number of stamina.

COTYLEDON. *Linn. &c.*

OBS. Cotyledon *coruscans, Nob. in Suppl. succ.* was described from a young plant, which now is less glittering and much larger, with deep-channel-concave recurved retuse but pointed leaves, and with a large panicle of flowers resembling that of C. orbicularis, but larger and paler. The name of sulcata, concava, or recurva, would be far better than that of coruscans for it.

SEMPERVIVUM. *Linn. &c.*

S. (*supra p.* 65) villosum: foliis teneris viridibus *laxum.*
cuneato-rhombeis ovatisve; summis subcordatis 1.
longitudine petiolorum. *

Habitat in Canariis. G. H. ♄.

Obs. S. villoso affine, at majus. *Caulis* (in planta seminali) 6-uncialis, erectus, simplex, purpurascens.

The author avails himself of the present opportunity of giving full descriptions of two species of *Ganymedes*, which were imperfectly announced in his *Suppl. pl. succ.* 134, and have hitherto been confounded under the name of triandrus. Mr. Williams, of the Nursery at Turnham Green, obligingly communicated living specimens of both on March 28th, 1820, from one of his greenhouse pits. They may be described as follows, and now form a section in the genus, viz.—

* Corollæ laciniis Cyclaminum modo magis reflexis; spathis bifloris; foliis valde canaliculatis.

ochroleucus. 1. G. (the pale drooping) corollæ laciniis planis ochroleucis oris albis, coronâ ochroleucâ sesquilongioribus: scapo teretiusculo.

Narcissus triandrus. Bot. mag. 48.—*N. cernuus. Salisb. prod.* 223.—*N. Juncifolius calyce luteo, reflexis foliis albis. Park. parad. t.* 93. *f.* 3.—*Ganymedes cernuus in Hort. trans.* 1. 352.—*Nob. in Suppl. succ. pl.* 130.

Obs. *Corollæ* laciniæ lanceolato-oblongæ, basi parum imbricantes, Cyclaminum more exactè reflexæ. *Scapus* gracilis teretiusculus pallide virens.

albus. 2. * G. (the twisted petalled) corollæ albæ laciniis tortis coronâ duplo longioribus; scapo compresso.

N. triandrus. Linn. sp. pl. ed. 2. p. 416.— *N. Juncifolius, flore albo reflexus. Park. par. t.* 93. *f.* 2. — *Ganymedes triandrus. Nob. in Suppl. succ. pl.* 130.

Obs. Scapus obtusè compressus subsolidus saturatè viridior priore 2-3-plo crassior. *Corollæ* laciniæ valde tortæ, basi parum imbricantes, longiores sed angustiores quam in priore, Cyclaminum modo minus reflexæ magisque tortim effusæ; exteriores costâ ochroleucâ, plus duplo longiores quam coronâ et a tubo aliquo reflexim progredientes. *Filamenta* interiora tubo longè breviora,, et usque ad antheras ipsas eo adnata ut in priore. *Stylus* magis exertus et tota planta major quam in priore, foliis fere sesquilongioribus plusve, duplo latioribus saturatioribus magisque effusis; forte cum illo proprium genus.

** Corollæ laciniis minus reflexis: spathis 1-7-floris. Huc referenda cætera.

FINIS.

Typis R. et A. Taylor,
Shoe-Lane.

ERRATA.

Page 47. l. 4, for Micranthidis, read Micranthis.
84 — 3, — *urbiniforme* —— *turbiniforme.*
——17, — viget —— vigebat.
p. 133, — *deltoide* —— *deltoides.*

And for Aloides and Aloidea, (passim) read Aloöides and Aloöidea.